| <210> <211> <212> <213> <223> <400> | 1211 471 DNA Glycine max unsure at all n locations 1211 | |
|-------------------------------------|---|------|
| totaacaata | | |
| | ttntattgaa agtgagagta ttaatagaag ataaaaagtt atcgattata | , 60 |
| | taaaattgaa aaacaactat gtagcttcta atttataagt tatatgacat | 120 |
| attttaagtt | agtagcatta gcatgtggtt gtaggttttt aaaatatgtt aaaattccat | 180 |
| tttagtctca | caaatttaaa atatcttgtt ctggtctatt gtttctagaa ataatatagc | 240 |
| taacaaaaa | aatactttta aataatcata ttttagtttt taattaatta tgaactctta | 300 |
| taattttta | aaaaataaat tttattaaaa tataaataaa ttatgtaaat aatggaataa | 360 |
| ttaaaatgaa | cagtataata ttaaaattat ttctaaataa aaatagtatt atattatagg | 420 |
| agacaatata | ttagagttct taataagtac tttagtcata taatctatcc a | 471 |
| <210> <211> <212> <213> <400> | 1212 460 DNA Glycine max 1212 | |
| tattagaatc | gtcattaata agcttatttc taatagtgtc agcgagacat taattgtcct | |
| | | 60 |
| | gttgtaagct aatttcccca ttattcccaa aacacgactt gtttcaatgt | 120 |
| | aattetgaat tttggcaact tgaagtatea tteaactaag etttgacaaa | 180 |
| | caaattatag attccattag gctctttgct tcgtgggttt ggctcttgta | 240 |
| caccatgtgt | gttgttttta tgctcctctt tcagttgata tatttccaat gcgtagtaag | 300 |
| tgatcgctag | ctgcttacgt gccaacatag ttgggattaa agtaactaat gtgatgcatc | 360 |
| tgcatgttgc | aatgttaaaa aagataggat aaattgtgac tctagttccc ctaattcttc | 420 |
| aaaaccatga | ttttaatccc ctacatttta attgctacat | 460 |
| <211> <212> | 1213 451 DNA Glycine max | |

| <223> <400> | unsure at all n locations 1213 . | |
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| agcttcacac | aatnntattt tttttatcaa acttgagttn tggaaaacca attactaaga | 60 |
| ctttcctaac | tagatgattt aaatgatgca tgttaatatg tgcagcccta tgatgccaca | 120 |
| atcatgaatc | atctatctta ctcaccaagc aacttagctc atgaaaagat acatgttcaa | 180 |
| cattcaacat | atagatatta cctattctct tactgatctg gacaacttta ccggatatgg | 240 |
| cttcacttat | aagacatcaa tttctattga actctatttt gaacccttta tcacaaagtt | 300 |
| gactaatgct | tagaagttat gctttagtcc atccacatat aacacattct taatctgagt | 360 |
| tntatgttga | ttccctatat catgagaaat catatttttc cttttgtggt nngtctcaac | 420 |
| ațgaccatag | tttggacttg tcacacgtca t | 451 |
| <210> <211> <212> <213> | 1214 397 DNA Glycine max unsure at all n locations | |
| <400> | 1214 | |
| tgtgaagttc | ttccaggact gtccagagca acattntgta cacatattgg agccattctt | 60 |
| gaaaatcatc | atgtatagga ttctaattcc tttctcttaa tttgtccaat tttttaagta | 120 |
| tttggttttg | tttccttgaa tgctttaact atttgataaa ttagtcttgc atcgacagga | 180 |
| cataaacaaa | gtgttactgc accaaagtcc attttcctct tgtgaagtgg aatagttgta | 240 |
| cgatgaacaa | gtatttcacc tatattagat ggatggcaaa gagaattagg gattctgcca | 300 |
| aagtatgctc | taggttatat gcaaggccta ataaattaga agctagatta attctatact | 360 |
| ctgtagcatg | taattaaata tgggaaaaat aatatat | 397 |
| <210> <211> <212> <213> <400> | 1215 334 DNA Glycine max 1215 | |
| ggatcttaag | caccgagget geagettaae acaattatge aacaaataat ataagtttee | 60 |
| ataagatata | ataaatctaa aatgtgcttt ctaagttgat acctaacatc ataataacat | 120 |

<210>

| aagctgattg | caatttcaaa | gttctttata | ctcttagaaa | aaaggtccat | acactcttaa | 180 |
|-------------------------|-----------------------------------|------------|------------|------------|-------------|-----|
| tttctccttt | tctttcaaat | ctcatgatta | agagaacaca | ttctcaaatc | aagaaaacaa | 240 |
| tatcatatga | ttgaattgaa | tacttatctt | ctaatgatgt | ttctctggtc | acaaataaca | 300 |
| ccaaatggtt | gaacttactt | acgtaataat | cata | | | 334 |
| <210> <211> <212> <213> | 1216 460 DNA Glycine max | ς . | • | | · . | |
| <400> | 1216 | | | | | |
| tatgcttatg | aagacttcct | gacactgcta | tgtgtgaagc | acctagtaac | ctctgtcgaa | 60 |
| catccctaga | ccaacagtgc | ggcagaggca | gccaatatac | tcaccctttg | ggccctatgc | 120 |
| actacactca | acaagtctaa | cggtccatgg | aaggaggaac | tccccagtat | actctgggcc | 180 |
| tatcattgct | aaccctagac | aatgaccata | aaaattcttt | tgcgactcac | atatggcata | 240 |
| aacaccatga | tccccgtcga | agtcagggaa | ccgtcaacaa | ggagattgtt | gttctagcaa | 300 |
| caaaaaaatg | aagacaacat | gagggtagaa | cataagacaa | ccgatgacgt | acaagaggta | 360 |
| gccaaaatca | aagaagaggg | taccaagctc | caagcatcaa | ggagatacaa | ccttaagttit | 420 |
| caacctcaag | ccttttaacc | cggcgacctc | gtctggcgag | | | 460 |
| <210> <211> <212> <213> | 1217 309 DNA Glycine ma: | x | , | | \$196 | |
| <400> | 1217 | | | | | |
| agcttgtagg | atatgtggat | cacggtactg | tccattatgc | acactacaca | tgctgatgct | 60 |
| gttcttgcca | acaatactta | ctcttcaagg | acgaatctga | agtacaaagt | tcttcaattt | 120 |
| tatttcacag | acttactcac | ttgacgatac | caacactttg | tgtcaacaga | ctggatgatc | 180 |
| tctcgtcata | aacatagcat | gtgttattca | atttatgtgg | gtcagacaaa | ggactggaaa | 240 |
| taacactatc | atcgtgttaa | tagataactc | actttataag | aaaagtaaaa | gttctctgct | 300 |
| gaaatcttg | | | | · | | 309 |

| <211> <212> <213> | 264 DNA Glycine max | | | | |
|-------------------------|-----------------------------------|------------|------------|------------|-----|
| <223> <400> | unsure at all n locat 1218 | ions | | | |
| | tgcgactctc aaagacgcac | tctgtttnca | ctcgtaacat | cacattgtca | 60 |
| ctttcctacc | ctaggttaac tctacatttc | atctctgaca | gtgntgcatg | agcaattttt | 120 |
| cagcatacta | catcgcaaac atcatcacaa | aaccctaaaa | cagaatgggt | atgtttgact | 180 |
| tcatcaagca | tggcgatttg aacaagtgtt | cagcaaatgt | cttcacaaat | tatcatcaca | 240 |
| cgccatatac | ctagcaagac tacc | | | | 264 |
| <210> <211> <212> <213> | 1219 406 DNA Glycine max | | | | |
| <400> | 1219 | | | | |
| ataagatata | ataaatctaa aatgtgcttt | ctaagttgat | acctaacatc | ataataacat | 60 |
| aagctgattg | caatttcaaa gttctttata | ctcttagaaa | aaaggtccat | acactcttaa | 120 |
| tttctccttt | tctttcaaat ctcatgatta | agagaacaca | ttctcaaatc | aggaaaacaa | 180 |
| aatcatatga | ttgaattgaa tacttatctt | ctaatgatgt | ttctctgttc | acaaataaca | 240 |
| ccaaatggtt | gaacttagtt acgtaataat | catatcatga | aatagcagag | * * | 300 |
| catcataaaa | tgaattaatc attcttacac | cctaagtagt | aatcataaca | atcatgtcta | 360 |
| atagagctgc | taaatattta gctcacctct | ctgccatcta | tggaat | | 406 |
| <210> <211> <212> <213> | 1220 416 DNA Glycine max | | | | |
| <223> <400> | unsure at all n locat 1220 | ions | | | |
| ntggtcctta | ggcctaagtg tatcactcta | gtcgttatgg | gaactaccta | catgctccaa | 60 |
| catggccctc | attcacgtac caagtggttt | cataggccat | ttctcaccaa | atcatgcgca | 120 |
| | 200255552 | aataaacaca | tatttaaaca | caaatagcag | 180 |

| gggggtaagg | gcaatgtggc | atgcccgatc | atttcagaat | acatcttagg | cctaaggcca | 240 |
|---------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| ttgcctataa | cccttcaact | caacataaac | aaacaaatat | tcaaagataa | cttgctcata | 300 |
| ttgtttacca | tatacatgta | acttggagca | ccaaagaagc | atcaatggac | agctagagag | 360 |
| cccatgaatg | gagtacttac | ttgttgggga | tgaataatca | tgcctaattg | caataa | 416 |
| <210> <211> <212> <213> | 1221 379 DNA Glycine max | K | · | | · | |
| agtcaactga | cgctgccgct | tcattgttca | atttgagcgt | ctagatatat | catgcgcctg | 60 |
| | | | | tcgagagctc | | 120 |
| atttccaccg | tctccttgag | ggaggtgctt | gacctccacg | tccgagtgaa | aaaggatgac | 180 |
| cattcttatt | tttcgagagc | ttccgttgtt | ttatttccag | cggctctata | tccgatgcgc | 240 |
| ctgaattgga | catccgagtg | aaaatttata | atcattaaga | tttctcgaga | gcttccgcac | 300 |
| tttcaattcg | agcgtctcga | tatattatgc | acctgaatcg | gacactcgag | tgataaatta | 360 |
| tgaccatttt | aatttctct | | | | | 379 |
| <210> <211> <212> <213> | 1222 227 DNA Glycine ma | × | | · | | |
| <400> | 1222 | | | | | |
| cttgcctcac | agatgtccac | gaaggataag | gcggccgaag | gaactagttc | cgctcccgag | 60 |
| tatgacagtc | accgctttag | gagcgctgta | catcagcagc | gcttcgaagc | catcaaggga | 120 |
| tggtcatttc | ttcgggagcg | acgcgttcag | ctcatggacg | acgagactgc | tgatttcgca | 180 |
| tatgacacag | gtttccgtca | cgtgtcatca | atcactaccc | ccatggc | | 227 |
| <210><211><211><212><213> | 1223 430 DNA Glycine ma | × | | | | |
| <400> | 1223 | | | | | |

| agcttgtagg | atagttggtt | cacggcaatg | actcattatg | cacacaacac | atgctgatgc | 60 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-------|
| agtccttgcc | aacaacacat | actcttcaag | gacgaatctg | aagtacaaag | tttatcaatt | 120 |
| ttatttcaca | gacttactca | cttgacgata | ccaacacttt | gtgtcaacag | tctgtaggat | 180 |
| ctctcatcat | aaacatagca | tgtgttatcc | aatttatgtg | tgtcagacaa | agtactggaa | 240 |
| ataacactat | catcatgtta | atagataact | cactttataa | gaaaagtaaa | atttctctgc | 300 |
| tgaaattctt | gcaagctaat | ttgttcttct | ttagaatacc | tacaccagag | aatagtagat | 360 |
| aagtcacttg | tagttggaaa | acagtggaaa | gcaacatatt | ctgatcattg | caaattgcaa | 420 |
| gcagtcaatg | | | | | | 430 |
| <210> <211> <212> <213> | 1224 403 DNA Glycine max | | 41 41 | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| tatagtaaaa | gaagcanagt | caaaattntg | tttcattnta | tcttgttgtt | aacacctaaa | 60 |
| aagttagttg | ttggagcaac | atcttgattg | gatacaactg | gcataagaaa | actaattgga | 120 |
| tacaattgat | gtggctaaat | tagggtataa | aggtaaaaca | actgggatgg | aacactttga | 180 |
| gtgatgtgta | ggccgattta | aagaacgtgt | aagacaaatt | gactgataat | ggagcggctg | 240 |
| aagggatgat | agccatgatc | tcctagattt | taaggagtgt | taatagtgtt | tcaactaata | 300 |
| taaccattag | tcaatctcta | taaataaggc | ctatcacatt | ataactaaca | cacagacatc | 360 |
| aatacataag | aatccattca | ttatcctgcg | tatatattgt | att | | 403 . |
| <210> <211> <212> <213> | 1225 176 DNA Glycine ma | x | | | | |
| <223> <400> | unsure at 1225 | all n locat | ions | | | |
| ttaagtcacc | tgcngcatgc | aagcttcccg | tatccgtact | tggaaggatc | tgattaccgc | 60 |
| cttcctaagg | cagtatcagt | acaattgtga | tatggctcct | gaccgtactc | tactgcagaa | 120 |
| tatgttcaag | aaagagggtg | aaacctttaa | agaatatgcg | cagcgatgga | gggatt | 176 |

| <211> <212> | 1226 313 DNA Glycine max | : | | | | |
|---------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| <400> | 1226 | • | | | | |
| tattcaacaa | tgacaaatca | cataacataa | ttttaagatt | ctgagcctca | ctagtagcag | 60 |
| tatctaaagc | aataatttct | gcttccatgg | tagaatgtga | aataatagtt | tgttcagcag | 120 |
| atttccatga | tattacacca | ccagctaaag | taaagacata | atcacttgtc | gattatgttt | 180 |
| catcagaatc | aaaaatccaa | tttgcatcac | taaacccctc | aattacttcc | taatctacca | 240 |
| actacatatg | ctatgacatg | cctatagaga | gttgtcaatt | gcatcaaaga | accactaatt | 300 |
| tgataatatt | gtg | | | | | 313 |
| <210><211><211><212><213> | 1227 564 DNA Glycine max | · . | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| catggcaacc | gaajaatcgta | aacggtataa | agtatcttaa | ctatacaaaa | cacncccggt | 60 |
| tgatgctgcc | gcgctgacac | cgcacancna | actgacgcgg | cgcacgcgag | caagntgatg | 120 |
| aatgaggacc | catctcatct | gtttctatgt | ggcaggcaga | cgaaggagcg | caactagtta | 180 |
| tccacatccg | caatgcgcgc | gtaaaaccac | catcccctgt | tgacggctcc | aactgaactc | 240 |
| acgtacgtcc | acgcaacccg | taggcaaagt | tataatgcag | ccgaggcccc | atcaaacctc | 300 |
| ccaagctgcc | acaacgaaca | atcaaaaaaa | catttaaaca | ggacatgcta | tcacagccaa | 360 |
| gcgaaacata | gcaaaggcgg | aaaactctgc | tcaacacaat | aacacaaagc | gcagcacttg | 420 |
| tctcctaaga | ccacagaaac | aatccttcga | gcaaagagct | taccgctgga | acgagctcaa | 480 |
| gagtatacca | gcaagctata | aagcataatc | gctacacggg | gcccgccgga | gggactagca | 540 |
| acaatcagaa | acaaggatga | cacg | | | | 564 |
| <210> <211> <212> <213> | 1228 540 DNA | v | | 18 T | | |

| | <223> <400> | unsure at a | all n locati | ons | | | |
|---|---|--|--------------|------------|------------|------------|-----|
| | tgaacgtgga | atgatacatg | cgataacgtg | acaaccactg | tactcgngcg | acactanana | 60 |
| | acacccangc | ttgcctgtcc | gatgtagcag | tatcgatggg | cctagctact | gttggcgaac | 120 |
| | ggttaccaac | ccggaatggg | tttaggcaaa | gaccacgacg | gtttgactaa | cctgattaat | 180 |
| | gccaaaggaa | ctcgtgtgaa | gctacggtta | gtctatacgc | ccactcacgc | agatctaaag | 240 |
| | agaagcatcg | tgggaaggaa | gagcggtagt | caaagctcgt | ggtcgagact | agaaggtgaa | 300 |
| | ggaagcccgc | actggcacat | aagtagaagc | tttataagcg | cggttctgat | ggacgaatgc | 360 |
| | taagcggacg | tgatatacca | tcacgatgtg | tcgagtacat | ttggattggc | acgacccttg | 420 |
| | ctctaccgat | ttttagctgt | gtaattggcg | tgcgctgtgt | catacactaa | tttcgatggc | 480 |
| | ggactctccc | ttgacgatcg | actaccttcg | cttgccctcg | tgaggtgtcg | gttccgaacg | 540 |
| | <210> <211> <212> <213> | 1229 336 DNA Glycine max | × | | | | |
| | <400> | 1229 | | | | | |
| | gctctctaag | atgataccta | tcatcataat | aacataagct | gatagctatt | accaagttct | 60 |
| | ttatactcgt | acaagaaagg | gccatacact | ctgaatttct | ccatttcttt | caaatctcaa | 120 |
| ٠ | gaataagaga | acaccttctc | aaatcaagag | gacaaaatca | tatgattgaa | ttgaatactt | 180 |
| | atcttctaat | gatgtctctc | tgttcacaaa | taaaaccaaa | tggttgaact | taggtacgcg | 240 |
| | ataaccatat | catgaaatag | cagaaaaagg | tcggccatca | taaattgaat | tactcatttt | 300 |
| | acaccctaca | tagtaattca | tacaatcatg | tctaat | | | 336 |
| | <210> <211> <212> <213> <400> | 1230 276 DNA Glycine ma 1230 | | 24 - | | | |
| | | | cgccgggaaa | | | | 60 |
| | gtcgagtagc | ccaggcattt | tgagggtggt | gttctccctc | cgcgtcagca | atgtcaagaa | 120 |

| gcactcttcg | tttcattgcc | ggctttttat | taatccgaag | tgtttatagg | tgatccgtaa | 180 |
|-------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| aaattggtta | gcagaagtga | agattaacat | caagttgatc | cgtaatttaa | tcctaattat | 240 |
| caaaaaactc | actattagtt | tacggatcaa | cttgat | | | 276 |
| <210> <211> <212> <213> | 1231 435 DNA Glycine max | ζ | | | | |
| <400> | 1231 | | | | | |
| catcccactc | ctatattggc | aagtctctca | tgacgatcac | aagctaacac | tacccattat | 60 |
| tgggagctat | gcaaaccaaa | ctctctctga | tgtaatgatt | ctaaactata | tattaatatg | 120 |
| atgttgatat | tgctatttat | ctttgtgttc | attcacatgt | cttcgatctg | atcatccatt | 180 |
| ttcataaact | gtcttaagat | ttaggcattg | gaaaatattt | atatgctcga | actggggaag | 240 |
| aacattcagg | taatccatct | ctagggatag | agtgacattg | tctagcctat | gcatgcatct | 300 |
| ttgctcgtaa | tgcaaattat | ctaatataac | ttttaaggga | ttaggagcga | tattaggtaa | 360 |
| tatatgctct | ctcacttgag | ggatcatggt | tagagtatgt | tagaacgtcc | aagtaattat | 420 |
| catattatca | taaaa | | | | | 435 |
| <210><211><212><213> | 1232 372 DNA Glycine mas | x | | | | |
| <223> <400> | unsure at 1232 | all n locat | ions | | | |
| agctatacag | cagattntag | taatgaccca | cttacctaca | attaaaacaa | cttaatgcca | 60 |
| ttaacctagg | gaattaaaaa | aacttaatgg | ctgagtgtaa | ctgaaattgt | ggcaaccaaa | 120 |
| agtcaccccc | aacagccaac | aagtcagcca | ccatttggtc | tcccaaaagg | ctgatgccta | 180 |
| tgttgccaat | tgggcccţta | ttacaacttg | aactaaacct | aactaaagcc | cttttagttg | 240 |
| attaacccaa | aacatatttt | tggtcagcca | actttacaag | gattgggcca | ttatttagac | 300 |
| aaactaaaca | ctctaaaatt | gaaacaaagt | ggtgtcattt | actcctcctc | catttgggcc | 360 |
| atgatacaac | tc | | | | | 372 |

| <210> <211> <212> <213> | 1233 471 DNA Glycine max | • | | | | |
|---|---|--|--|---|---|---------------------------------|
| <400> | 1233 | | | | | |
| ggaaattaaa | caatggaagc | actcgagata | ttcaaatggt | cataacttat | cacacggagg | 60 |
| tctgattcat | gcgcataata | tatcgagacg | ctcgaaattg | aacaacgaat | gctctcgaga | 120 |
| aattcaattg | gtcataactt | gtcacacgga | agtccaattc | tggcgcatca | catatcgaga | 180 |
| cgctgtaaat | tgaacaccgg | aagctctcga | gaaattcata | tggtcataac | ttatcacaca | 240 |
| gaggtttgat | ttaggcgcat | aatatatcga | gacgctcgaa | attgaacaac | gaatgctctc | 300 |
| gagaaattca | aatggtcata | acttatcaca | cggaggtctg | attcaggcgc | ataatatatc | 360 |
| gagacgctcg | aaattgaaca | acgaatgctc | tcgagaaatt | caaatggtca | taacttgtca | 420 |
| cacggatgtc | caattctagc | gcatcacata | tcgagacgct | gtaattgaac | a | 471 |
| <210> <211> <212> <213> | 1234 410 DNA Glycine max | ĸ | | | | |
| | | | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| <400> | | all n locat: | | ccatagacca | attggaaagg | 60 |
| <400> | 1234 | all n locat: caggtaggtg | acaagaattg | | • | 60 |
| <400> agctntagct agtaagtctt | 1234 tccaactcaa | all n locat: caggtaggtg tgtatgttgt | acaagaattg tctgcatgcc | cacaaagctt | catctagctt | |
| <400> agctntagct agtaagtctt ttgggaccaa | 1234 tccaactcaa gtaggagcta tccttccttg | caggtaggtg tgtatgttgt attgagcaac | acaagaattg tctgcatgcc tgtttttct | cacaaagctt | catctagctt | 120 |
| <400> agctntagct agtaagtctt ttgggaccaa attagaaact | tccaactcaa gtaggagcta tccttccttg tcagcttgcc | caggtaggtg tgtatgttgt attgagcaac catgtggtaa | acaagaattg tctgcatgcc tgttttttct ggcgaagcta | cacaaagctt aatattttct ccttgggttt | catctagctt | 120 180 |
| <400> agctntagct agtaagtctt ttgggaccaa attagaaact tgttggagga | tccaactcaa gtaggagcta tccttccttg tcagcttgcc ctttggtgag | caggtaggtg tgtatgttgt attgagcaac catgtggtaa ttatacatta | acaagaattg tctgcatgcc tgtttttct ggcgaagcta caaaaatgag | cacaaagctt aatatttct ccttgggttt atcctccgtc | catctagctt taactttcct gacactgtag | 120 180 240 |
| <400> agctntagct agtaagtctt ttgggaccaa attagaaact tgttggagga accctgggtg | tccaactcaa gtaggagcta tccttccttg tcagcttgcc ctttggtgag | caggtaggtg tgtatgttgt attgagcaac catgtggtaa ttatacatta tgagaagata | acaagaattg tctgcatgcc tgtttttct ggcgaagcta caaaaatgag ttatttctta | cacaaagctt aatatttct ccttgggttt atcctccgtc ggaagcaaat | catctagctt taactttcct gacactgtag acttattagt | 120 180 240 300 |
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| nttcaacaca | naagttagtc | gtaaataacg | actaacaact | cccctaaatt | tacagttttg | 60 |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| cttgtcctca | agcaaagaaa | gaacagttca | cttgtcctca | agtgacaagc | tcacagtggt | 120 |
| aagcaatgct | ttcaaccaat | ttatggttct | tttcaaccaa | caaagaattc | aatcacatga | 180 |
| acacaagtgg | caagcaatgc | tttcaaccaa | caacttttca | caagatatac | agattttcaa | 240 |
| agatatgaac | atgataatta | ggcacactaa | tgaaataagc | tagcaagcaa | gacaaatatc | 300 |
| aaggaaggtt | catcaagcca | attcctcatg | gtcactgttt | cactcaagca | caagtgttta | 360 |
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| acagtcacaa | acacacta | | | | | 438 |
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| gcacaacaag | ttttccacat | ccacaatgcg | cgcataaacc | caccatcccc | tgttgcccac | 120 |
| ctccaactga | actcacgtac | tcccacgtag | cccatatcct | cgtttctctc | cacccgggtc | 180 |
| cccatcaatc | ctcccaagct | tccacaacat | ccaatcaaaa | caacattcaa | acagcacaag | 240 |
| ctatcacagc | caagcaaaac | agagcaaagg | cagaaaactc | tgctcaacac | atcaaccaaa | 300 |
| atcacagctt | ttctctctta | aggaccacag | taacaattcc | ttcgatccaa | ttcgttaacc | 360 |
| cgtggatcga | ctnncaaaat | ttactggaag | tctatagt | | | 398 |
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| atcatcctac | taggacgact | gagadaactg | gggcaaatga | agagggtgag | aaagagggag | 120 |
| aaacccatgt | tgtgactggc | attcctatac | ggccaagttt | cccaccaacc | caacaatgtc | 180 |

| attactcagc | caataacaaa | cctcctcctt | acccaccgcc | cagttatcca | caaaggccat | 240 |
|-------------------------|-----------------------------------|-------------|------------|----------------|------------|-----|
| ccctaaatca | accacaaagc | ctgtctaccg | cacttccaat | gacgaagacc | acctttagca | 300 |
| caaaccaaaa | aacaccaaca | aaaaggaatt | ttgtagcaaa | aagcctgtag | ggttcacccc | 360 |
| aaattccttt | gtcatatgct | aaacttgatc | ccatatccac | tcaataattc | aatggtagcc | 420 |
| ataacccta | | | | | | 429 |
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| tttcgagcgt | ctagacatag | tatgcgcccg | aatcggacat | ccgtgtgaaa | agttatgacg | 120 |
| atatgaatat | ctcaagagct | ttcgatggtg | agtttcgagt | gtatcgatat | attataatac | 180 |
| ctgaatcgga | cctccgtgtg | aaaagttatg | actatatgca | tttatcgaga | gtttccgatg | 240 |
| tatagtttcg | agcgtatcga | tatattataa | gcctgaatcg | gacatccgtg | tgaaaagtta | 300 |
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| caaagacatg | catgatttta | ctattgtatt | tcttctccat | ctcttccatt | gaaaagtgca | 120 |
| ttttttgtac | tattttattt | ttctttcttc | cattgtatat | atatatatat | atatacctat | 180 |
| tgatttctta | ttgcagtcat | gatttgagtt | tttagagcaa | actctttgag | tcgatggtgc | 240 |
| tactatcttc | gaaaatcctt | ctatgaatct | tcgatagtat | ccaaccaatc | caacaaaatg | 300 |
| tgtaatctct | atagctatct | tatgggcgtt | tcactgcaaa | attgtgtcta | ccttggaagg | 360 |
| atccactaca | ttgctaccca | ccaagatcac | atgacctaag | atccgtacct | catcaagtca | 420 |

| aaac | | | | | 424 |
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| agaaagttat | gagatactta caaggaac | aa aagatcacat | gcttacatat | aggaggtcta | 120 |
| atcatcttaa | ggtgattggg tattcaga | ct catactttgt | tggatgtgtg | gttatgagaa | 180 |
| aattcactct | tggctatgta tttctttt | ag tcggaggagt | aatatcatgg | aagagtgcaa | 240 |
| agcaaccagt | tgttgttgtt gcatctac | ca tggaagtaga | atttgcagca | tgttttgagg | 300 |
| ctacaagtta | agctaattga ctgcgaaa | ct ttatctcagg | gctctgaatt | gacttacgac | 360 |
| tgctaggcat | tgaaat | | | | 376 |
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| tatataaagt | cggacaccgt tcgttttt | tt tccttgaacc | aaaccggtac | cggttctccc | 120 |
| ttttttgccc | gatggaacta acaacggc | cc aatttttatt | cctttcacta | tttctaactt | 180 |
| tccgaaaact | aaaaataccc cccttgtt | gc ttacaaggca | ccctgcattt | tctttatgtt | 240 |
| tttttgttta | cacaacctat taattgag | gc tgggctttta | ttttcacatc | aatttaatat | 300 |
| aagccttgct | ttaaatttct ttatatat | cc caacctggtt | attgtggcct | gctatatttt | 360 |
| cacccacaat | tattttgcac ggcaatgt | at ttttagttaa | gaccatatat | tttgctcggt | 420 |
| tttatttacc | tgggatacta ac | | | | 442 |
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| acatcttctc | aaagatccca | acggtcagat | catggaaagg | tgcttggtga | agttgaagac | 120 |
| caaatttcga | gaagatccaa | cggttaatga | aggctggaca | gtgtttttac | cgagccagct | 180 |
| tcatgtagct | atttctagaa | gctttattaa | gaggcttttt | ctag | | 224 |
| <210> <211> <212> <213> | 1243 443 DNA Glycine max | × | | | | |
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| agcttcctcg | gngccatttc | ctgcgaaggc | ttacat <u>t</u> tgg | aaagctagtt | ctaccagtgn | 60 |
| gatactattc | ttaaaacaaa | aatgacatac | aacctcctcc | cataaataca | aacatcaatg | 120 |
| taaatttaga | ggaagcttat | gcgcatattt | ccttacaaac | gttctcttgc | acaagacatt | 180 |
| ctattaacca | aaaaaaaatg | cacccatata | caatcaaggc | agcttcgtta | cctagattat | 240 |
| ttacacgtac | ttccaaggtg | tatttgttac | ttacatcaca | cacctccttg | gctaaattca | 300 |
| catacatgca | tactcaaagc | attttgtggt | accaaaaatt | gcacatgtgc | acatcttggt | 360 |
| atttctaata | cctatacata | cacaaacttc | atgatgaatc | ttgactatct | acacaataag | 420 |
| gngctacatt | ntatgctctt | ttc | | | | 443 |
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| gataaaaaga | gaaaattact | aagtttgtta | gcgacgttag | ggagtcatct | aacaagaaat | 120 |
| taatactttt | caaaattttc | aagaactcca | acatattta | cccaatttat | aatttaaaaa | 180 |
| ttaaacaaag | tttttattt | tctaaattca | tattttaaat | atattctaac | atgagaaaaa | 240 |
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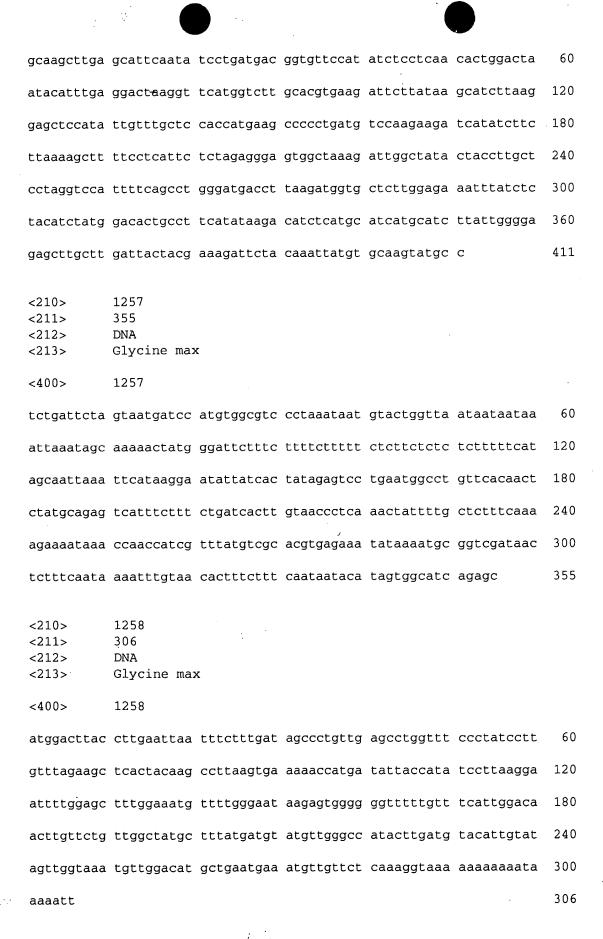
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| ccattgggag | ttacatcccg | aaggatatga | tcaaatagct | aactgcgtca | ttctatctca | 120 |
| gtaccaactc | tattttgtta | aatgggtttt | tttttatgga | taatcgattc | tggtgaattg | 180 |
| tgaagagtta | cttcatgtat | aatgccttct | attccacana | actcattaaa | taaaacatat | 240 |
| tcaccactca | tatcggatct | acaccattgt | attttcttat | ttattttatt | ttccactttc | 300 |
| gctctatata | aaagaaacat | ataaaacact | atacaatata | tggatagcat | atgaatgacc | 360 |
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| ttgacctttt | tg | | | | | 432 |
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| ggaacgtcga | gaagcagatc | ccgtcggagc | cgtactgggc | attcttgatt | ctgtacacat | 120 |
| cagtgacact | agaataatat | cgtctctgcc | gatctgtctg | ttcgctgctg | tatatgtttg. | 180 |
| ctagtcaagg | gatattttca | ttagaatcaa | aatgtgctct | cagcgttata | acaggagaga | 240 |
| cgacaaatgg | atttggacag | gacaacagag | gcttgtgtga | gagaaacgtt | agaacctt | 298 |
| | 1247 268 DNA Glycine max | к | | | | |
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| cattgacaat | tgaagaaagg | aattgcatga | cagcgactga | ccaatgtttc | aatttcattc | 120 |

| aactaatgga | atcgggttga gcctcctat | t atcccaggca | tttccttcct | gtgggttatg | 180 |
|----------------|----------------------|---------------|------------|------------|-------|
| | | | | | 240 |
| ctgaaaactt | ttatttaagg tgggtttgg | ji gggagaaaic | cciaccacac | geeecaaca | |
| aaatcgatct | tttttaaagt ttgaagta | | | | 268 |
| | | • | | • | |
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| <213> | Glycine max | | | | |
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| catttgttac | tcaaaccacc acccacat | aa aatttttggg | ttattggtgg | aggtaccaac | 120 |
| | | | | | |
| gccttaatgt | atggttagng ctattctt | gt tttatggctt | ctgccagccc | tttgttttat | 180 |
| aaaaatagat | tcaatcaaac cacgcata | ta ctgagctaat | ttgataaatc | ataaa | 235 |
| | | | | | |
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| account | | 5 | | | |
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| gtttatgagc | aactcaggat tcaaaaga | tg tgacatgcac | cattgctgct | atgttaaaaa | 120 |
| | | | | | 132 |
| atatactacc | ac | | | | 1 J Z |
| | | | | | |
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| | cgagtggagg | aacgccccgg catttacgca acaagcataa tgtaaacctt tacggattta 18 | 80 |
| | aaagctctat | agttgggcct aggctttaga gatttcattt tgctaaggct ctgtgtcttt 24 | 40 |
| | tgtttttgaa | tttataatac aaggatettt etteatetgt taetggtete taeceattet 30 | 00 |
| | cattcatttg | catgettact tettttetg acaeggeaga ttegatgace gageeeega 30 | 60 |
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| | <210> <211> <212> <213> | 1252 365 DNA Glycine max | |
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| | tgtaggatta | tgtggtaccc actcacatgt ggtactaggt ggcgctcggg cgatggtgca | 60 |
| | caacaagttt | tccacattca caatgcgcgc ataaacccac catcccctgt gtggcacctc 1 | 20 |
| | caactgagct | cacgtactcc cacgtagccc atatactcgt ttctgtcaac accgtgtccc 1 | 80 |
| | catcaatcct | cccaagctta cacaacattc aagcacaaca acattcacac acgccaagct 2 | 40 |
| | atcacagtca | agcagaacag agcacaggca gaacactctg ccaaaacacc aaccagatca 3 | 00 |
| : | cagctattct | cactcagcga ccccagtaac aataccttcg ctccaattcg ataaccgctg 3 | 60 |
| | gatcg | 3 | 65 |
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| | tcaccggatg | atgccgatcg tacatttnct aatcgacttt atccaattgt tattcaggga | 60 |
| | ttgaatagaa | tatacaatgt ccgttgtcgt tcgttatatg gccccgactg atatctttca 1 | .20 |

| gacgacattg | cgcaatttct | cttacaaacg | ctggccgata | atgtttttt | atttacggta | 180 |
|--|---|---|--|--|--|--------------------------|
| taggaagttt | tttgttttgt | t | | | | 201 |
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| ctagggaata | agccttggaa | gaaggagctt | caccatcaag | atgagccttg | gataagaagc | 180 |
| ttggagagga | tgcttcaatg | gaggaaaaga | aagagggaga | gaaagagaga | ggggggagca | 240 |
| cgaaattgaa | agaagataaa | gggagagaag | ttgaactttg | agttgtgtct | cacaagactc | 300 |
| tcattcatca | aagttacaac | aagtgttata | catgcttcta | tttatagact | aggtagcttc | 360 |
| cttgagaagc | tttcttaaga | aaacttcctt | g | | | 391 |
| | | | | | | |
| • | 1255 326 DNA Glycine max | κ | | · | | |
| <211> <212> | 326 DNA | ς. | | | | |
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| ttctcctaag | aaaagtggac | acgttacata | tggcgacaac | aacaaaggca | aaattattgg | 240 |
| agtcggtaaa | ataggtacga | gttcttctac | tcctattgaa | aatgttatac | ttgtacaagg | 300 |
| tttgaagcat | agcctattaa | gtgttagtca | attatgtgat | aaaggatata | aagtatcttt | 360 |
| tgattctgaa | aaatgtgtta | ttaagaatga | gcatgataaa | gatatcgaac | atatatggtt | 420 |
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| gttgaaagac taagccacca aattttgaaa | 1260 actattatat ttatgaaacc tggataatta | atatacttaa tgccttgcta ggtttgcaag | tgaaaacaaa | agggtgcaaa aattataaaa | tatttttaac tcctgtaatt | 120 |
| gttgaaagac taagccacca aattttgaaa cgtttaaatc | 1260 actattatat ttatgaaacc tggataatta atctgttgat | atatacttaa tgccttgcta ggtttgcaag atagacaagc | tgaaaacaaa gaggcccgag | agggtgcaaa aattataaaa atgttaaacg | tattttaac tcctgtaatt attctactgt | 120 180 |
| gttgaaagac taagccacca aattttgaaa cgtttaaatc gatttggata | 1260 actattatat ttatgaaacc tggataatta atctgttgat tgatagattt | atatacttaa tgccttgcta ggtttgcaag atagacaagc atttctaaat | tgaaaacaaa gaggcccgag atgcggaatc | agggtgcaaa aattataaaa atgttaaacg catgtaccac | tattttaac tcctgtaatt attctactgt aaatgtggta | 120 180 240 |
| gttgaaagac taagccacca aattttgaaa cgtttaaatc gatttggata | 1260 actattatat ttatgaaacc tggataatta atctgttgat tgatagattt | atatacttaa tgccttgcta ggtttgcaag atagacaagc atttctaaat attctgatcg | tgaaaacaaa gaggcccgag atgcggaatc acttatcaaa | agggtgcaaa aattataaaa atgttaaacg catgtaccac | tattttaac tcctgtaatt attctactgt aaatgtggta | 120 180 240 300 |
| gttgaaagac taagccacca aattttgaaa cgtttaaatc gatttggata tggagcatta <210> <211> <212> | 1260 actattatat ttatgaaacc tggataatta atctgttgat tgatagattt ctagagttgc 1261 433 DNA Glycine max | atatacttaa tgccttgcta ggtttgcaag atagacaagc atttctaaat attctgatcg | tgaaaacaaa gaggcccgag atgcggaatc acttatcaaa | agggtgcaaa aattataaaa atgttaaacg catgtaccac | tattttaac tcctgtaatt attctactgt aaatgtggta | 120 180 240 300 |

| taaatgtagg | gaagaatttc | tctaagaaca | cccgcttaag | gtcatcccag | ctgaaaatat | 120 |
|-------------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| acctgcgagc | aagggaatat | agccaatctt | ttgcactccc | tccagagaat | gaggaaaagc | 180 |
| ctttataaag | atatgatctt | cttggacgtt | atggggcttc | atggtggaac | atacaatatg | 240 |
| gaactcctta | agatgtttat | gaggatcttc | acctgcaaga | ccgtgaaact | tacgcagcaa | 300 |
| ttgtattatt | ccagtcttga | gaacatatgg | aacaccctca | ttaggatatt | gaatgcacaa | 360 |
| gctttcataa | gtgaaatcag | gtgcatccat | ctccctaaga | gttctttacg | aggtggaggt | 420 |
| tgaccatgtt | ctt | | | | | 433 |
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| | | ttotttacat | aggacgetg | tgctagacct | tetttateet | 60 |
| | | | | agttagaggg | | 120 |
| • | | | | | ttgcaaatca | 180 |
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| ccatggagta | aac | | | | | 1,0 |
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| gctttgtcca | gagctctcgc | tgttcaatat | gcatcgtttc | atgatcgtct | gcgcgggctt | 120 |
| atagcctaca | ccagacatgc | cacgaccatc | ttgagcattt | atgaggctcc | gtatgccaac | 180 |
| ttcgtgcgtg | cctatacaca | ttgcgggtta | ataaccgttc | cccaacataa | gtcaggacct | 240 |
| tattactgtt | gcaagagcct | gacaaggttg | accacaaacg | gattcctctg | ttgagctgct | 300 |
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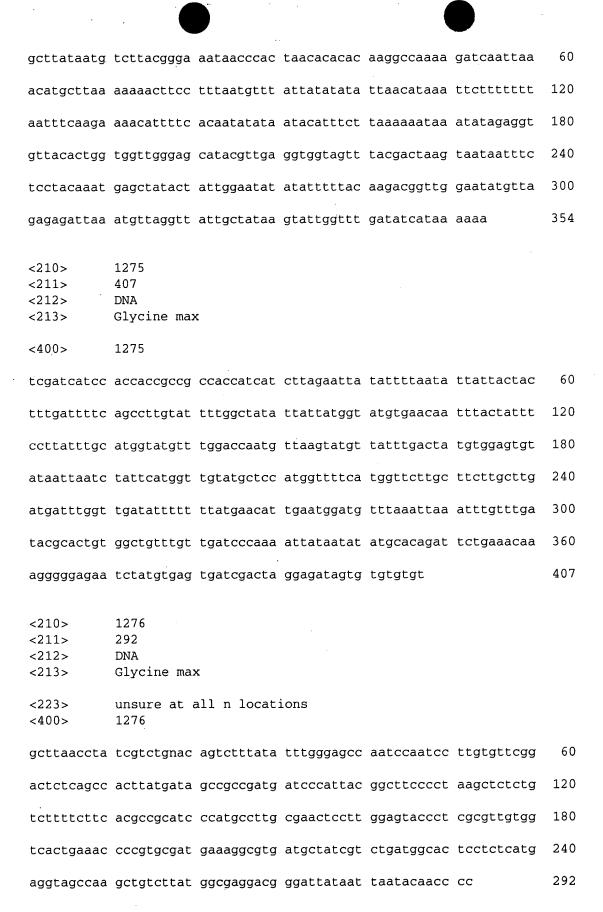
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| tggtagaaga | acatctactt | tcgtttgccc | ataagaatga | gcttgtatac | aagagctatg | 120 |
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| acggtaccgt | tgaagtagat | aaatgtatct | tccttggaaa | tatacattgt | ctttgtctga | 120 |
| aattgaacat | gtatttcttg | gtccagagtt | tcgcaagtca | aatgactctg | ttgctatatc | 180 |
| ttatagaagt | gcatcttctg | agagaacttt | attttataaa | ttgaatgaat | tacgaattaa | 240 |
| aagaaattta | cgaattagaa | gactaaaaga | ctcacttatt | gaattctata | aattaacaaa | 300 |
| cttacgaatt | gtaagaaata | aagtttggaa | ttatcagaac | tgaataagtg | attaataaaa | 360 |
| atatgttatt | tagcaaaagg | agata | | | | 385 |
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| aaatcaacca | actcatctga | catcattttc | caataatggt | cgattggaat | gtccatttgt: | 120 |
| tnttgtaccc | tggctgattg | caaatgtatt | t <u>cgaccggaa</u> | gtacagcatc | atgcccatta | 180 |
| atctatcgaa | taggggt | | | | | 197 |
| <210> | 1267 385 | | | | | |

| | | | • | | | |
|-------------------------|-----------------------------------|------------|------------|------------|------------|-----|
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| cattgttgga | cctcccacaa | tagtatggag | tctccaccac | ttttcacaat | tctgatttaa | 120 |
| ctccttacgt | aggcggagct | gacattgagg | aggaggaact | aacatgattg | atgtctaatt | 180 |
| ctcttaaagg | gaaggggatg | atgcaatcct | ccctatgaag | ggaccaatca | ctataaccat | 240 |
| gatcaagaag | ctccaaaaaa | gattgagcta | aagctgatga | ataacgccct | agggttctca | 300 |
| tgaaccttac | ggacattttt | gagcccatga | gccaaggttg | cgtccaatta | tctttgtaca | 360 |
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| actatgccat | gtgcttccat | gttcaatttt | gagcatctcg | atatattatg | cacctgaatc | 120 |
| gggcatctga | gtgaaaagtt | atgccatatg | agttagccga | gagcttcgtt | gttcgatttc | 180 |
| gagcgtcatc | gacatattat | tggcctgaat | cggacatccg | agtcaaaagt | gatggcagtt | 240 |
| taaactttac | atgtgcttcc | atgtttaatt | ttgagcatct | cgatatatta | tgcacctgaa | 300 |
| tcggacatct | gagagaaaag | ttatgccata | tgagatagct | gagagcattc | gttgttcatt | 360 |
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| agagctcaaa | agtcaagatc | acttcctgat | aacaaagatg | atgacattca | agaatgagtt | 120 |
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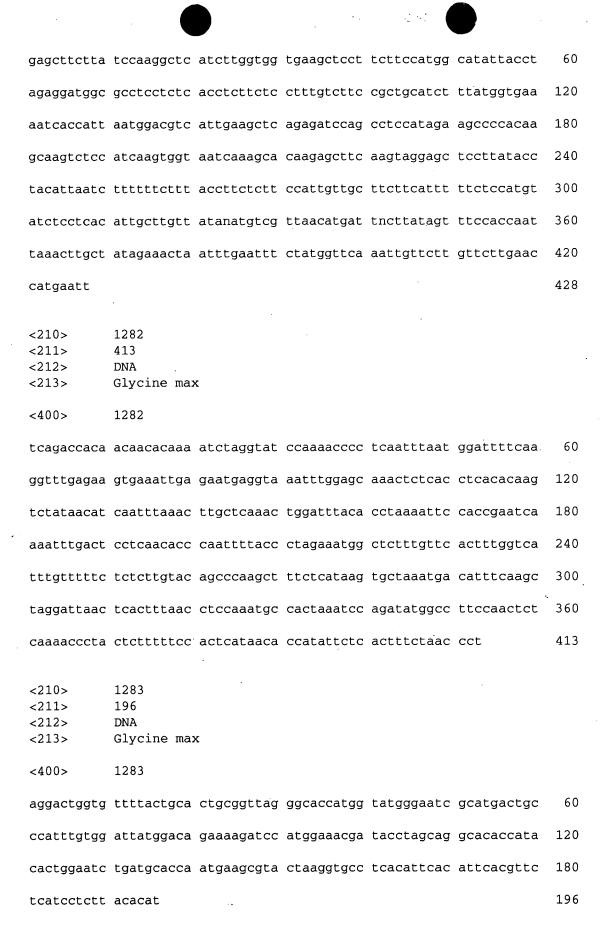
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| tcacacaatc | attaccacag | agtttttact | ctct | | | 334 |
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| actgttcttc | cttcccgcga | tgcttctttt | catgtccgcc | tgagtgggct | tatagcctaa | 120 |
| accatacttc | ccacgatttc | cttgggtatt | tatcaggcta | gttatgccgc | cgttgttttt | 180 |
| gcctaaaccc | atcccgggtt | cataaccgtt | ccccaacata | actcgggcca | tcattaccgc | 240 |
| tgcatcggac | agacaaggct | gcccaaagag | ggagtccacg | gaggaaatgc | tgaccacctc | 300 |
| aaaagactgg | aaagcagttt | ctaacgattc | ttctgcggct | tccacataag | gcatggagga | 360 |
| tgggcagctt | accaagatat | cttcctcgcc | tgacacgatg | | | 400 |
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| aacatgctta | aaaaaacttc | ctttaatctt | tattatatat | attaacataa | attcttttt | 120 |
| taatttcaag | aaaacatttt | cacaatatat | aatacatttt | ttaaaaaata | aatatagagg | 180 |
| tgttacactg | gtggttggga | gcataggttg | aggtggtagt | ttatgactan | ggtaataatt | 240 |
| ctcctacaaa | tgagctatac | tattggaata | tatatttcta | caagacggtt | ggaatatgtt | 300 |
| agagagatta | aatgttacgt | tattgctata | aggattggtt | tgatatcata | aaaaattggt | 360 |
| gtagtgaact | ttcatcgcat | agtttaaaga | catcacaact | aaaactaaca | cgagtgttgt | 420 |
| attaatgtct | taacatacgt | cttaatcaat | | | | 450 |

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|----------------------------------|-----------------------------------|------------|------------|------------|------------|-----|
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| cctcggaagc | aaataataat | agaatgaaaa | tatccaatca | aagaaaaaaa | aaagagaagg | 120 |
| aaaatttcca | atcaaagaga | aagcaaaata | aaaaaagaga | gaaggaaaat | ttccaatcaa | 180 |
| aggaaaaaag | ataggaaagg | aaattcccaa | tcaaagagtg | ggagaaagcg | aaaagaaaag | 240 |
| aaagataatt | cccaaccaaa | gagtgggaga | tagtaaaagg | aaggaaagat | agctcctgat | 300 |
| caatgattga | aagacatcag | aatatatgtg | cataaaggtc | tttggaccgg | acaatatctg | 360 |
| tacaatacag | aattgtcacc | aaatgaacaa | aataaaaagg | gaaaggaaac | catgacctga | 420 |
| aatggtct | | | | | | 428 |
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| caagacgctc | gaaatttaac | aacggaagct | ctcgataaat | tcaaattgtc | ataccttttc | 120 |
| acacggaggt | cctatttatg | cgcttaatat | atcgagaagc | tcgaaattga | acaacggaag | 180 |
| ctctcgggaa | atcaacatgg | tcataactta | tgactcagat | gtccgattat | gcgaatcata | 240 |
| tatcgagaag | ctcgaaattg | atcaatggaa | gctctcgaga | attccaatgg | tcataacgtt | 300 |
| taacatggag | gtctgaccat | gcgcataata | taatgacacg | cttgaaattg | aacaacggaa | 360 |
| gctcttgaga | taaccaaatg | agcattactt | ttcacacgga | | | 400 |
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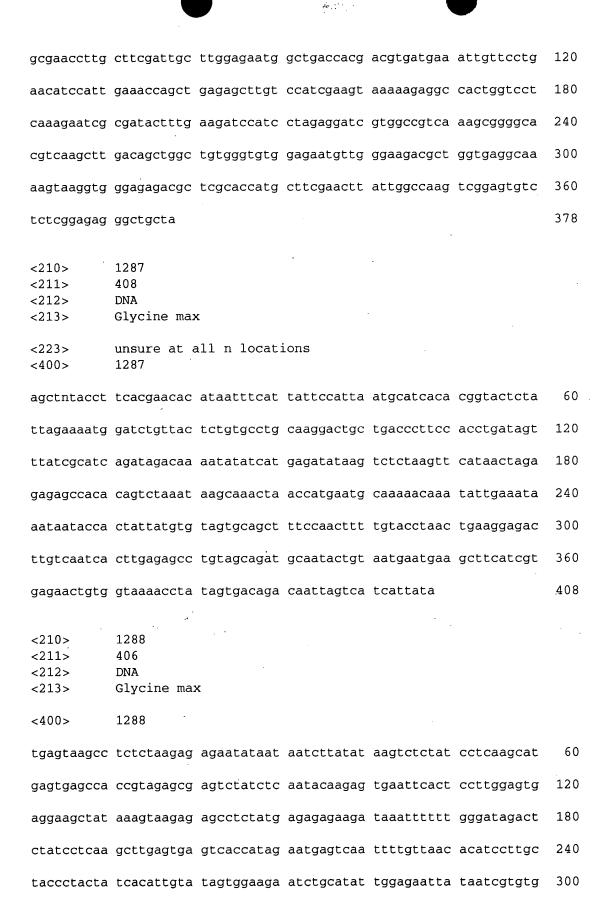


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| atggtggctt | tcgaacaaac | aaataaaaac | ccttcgctca | atggcgcatt | attcttaata | 120 |
| aattctaaaa | aagaaaaaaa | aaagtaagag | gttactgtat | gagttcttga | aagaatgctg | 180 |
| ctgcgtataa | aggtgcgtct | gcaatgagag | aagggatgag | ctatattatt | atattggtgg | 240 |
| agaagatgga | agaacctcgg | tattgggaga. | ggagggggaa | caggtaaagg | ggtctcttcc | 300 |
| ttcacctcca | tgctatacca | tattcatttt | acttttatca | tatgatgtct | catgatctaa | 360 |
| tcaaatcctc | tttaagaagt | taaatagaat | ataaaat | | | 397 |
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| <400> | 1278 | an aat too as | 020000000 | 2+902290++ | atacaataat | 60 |
| | tcgagacccg | | | | | 120 |
| · | tcagtttgtg | | • | | | 180 |
| | acattgcgcg | | | | | 240 |
| | ccacgtagca | | | | | |
| _ | caaacctcct | | | | | 300 |
| | tgccgggcgt | | | | | 360 |
| | cacagaagca | | | | | 420 |
| | atagtctact | catctacggc | tcacgagatg | acggggaaac | cccatagtaa | 480 |
| aaagtttg | | | | | | 488 |
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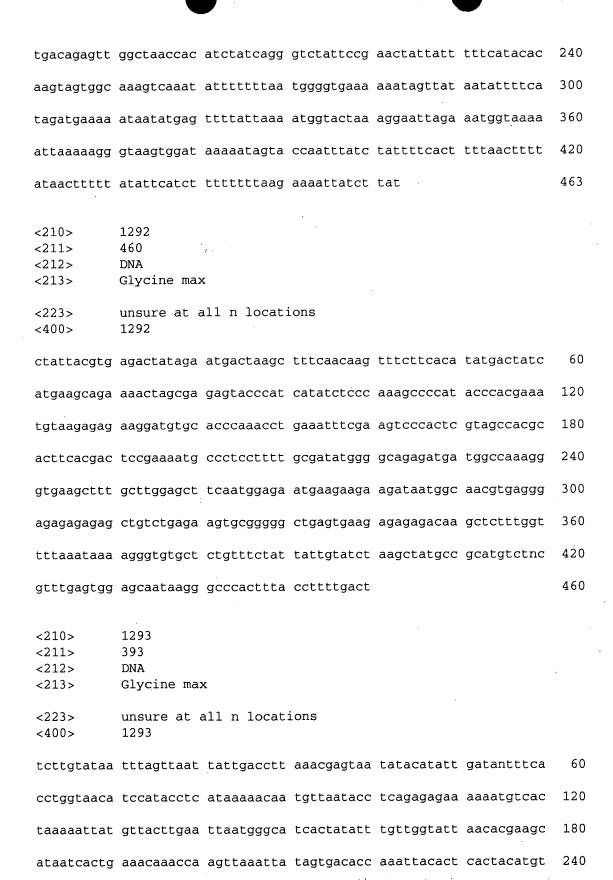
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| caacaagaat | caagccaagg | ctattgtgca | agcaatcaat | ggggcaaaac | acaccaaatg | 120 |
| attataatga | tggatggctc | aaattctcac | aaaggtaaaa | tcatcacttt | caaattgagc | 180 |
| tttcaaaact | atcatgacat | gtagagaaga | atcaaggatt | tcaagtcaca | aaatgtcaag | 240 |
| aacttttatt | ttcaaaacaa | ttacccattt | cttgaacata | tcctataatt | caaagaaaaa | 300 |
| catgcaaagt | cgtacgtgca | cacaaaattg | acccaaaata | ttaaactgaa | aatccgacga | 360 |
| tactaacagc | attaacatat | taacacaact | aacaaattta | acaaaccaac | ataactagca | 420 |
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| ctttccttgt | tttgaagctc | actacaagcc | ttaagtgaaa | aaccatgata | tcaccatatc | 120 |
| cttaaggaat | gttggagctt | tggaattgtt | ttgggaataa | gtgtggggg | tttttgtttc | 180 |
| attggataat | atgttttgtt | ggctatgctt | catgatgtaa | ttttggccca | tacttgatgt | 240 |
| acattgtata | ttggttaaat | gttggaaatg | cggaatgaga | tgctgnttct | caaatgctac | 300 |
| agagtattaa | aaatataatt | aaaaaataat | aataattaaa | aaatcgaata | agaacaagat | 360 |
| aaccaagaaa | gttgagtgaa | taagatctta | aatggaatat | gaatgatgag | actgcttgat | 420 |
| ctactctcta | tggttaaatt | ctatctttat | gtcttcttat | atttctctat | atatgcactt | 480 |
| attccc | | | | | | 486 |
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|----------------------------------|--|------|
| <223> <400> | unsure at all n locations 1284 | |
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| ctatccgtga | cacttcagag tactcaagct ctcgtatcac tttacacaca cttcctgata | 120 |
| gcgccgtctt | aggtggcttg caaacgaaca taattaaccc cattgctcct aggcgcacta | 180 |
| ctctcaaaga | attgcaagat agaagaaaac aagtaacagg gtactgtctg agctcttgaa | 240 |
| acaatgctgc | tgcgacataa ggcgcttcag acacgagata acgcatgagc tatatatata | 300 |
| tatgggtggc | gaagacggat gaaccttgga attgcgagat gagggggaac acgtataggg | 360 |
| gtctctccct | ttacctgcta gcaatacctg tatgtgcata ctttcatctt acgatgtccc | 420 |
| atgatctaat | ctaaccccct ttagagccta actcattata agatcgatga cttttctctc | 480 |
| aattagttat | attaatcttc aaattgtaga ctgcaactac gatttttacg cctacataat | 540 |
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| actacggcaa | atgaagaggg tgagaatgag ggagaagccc atgctgtgac tgccattcct | 120 |
| atacagccaa | gttgtccacc aacccaacaa tgtcattact cagccaataa acaaaccttg | 180 |
| tacttaccca | | 190 |
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| ctcccatgac | tactcttaat | tactaagtgc | ctattttaac | tttacgaagc | gggatagtcc | 360 |
|--|---|--|--|----------------------------------|--|--------------------------|
| gaatattcac | tacaaagcct | gtatataaaa | atacttcatg | catgta | | 406 |
| . – – – | 1289 273 DNA Glycine max | ς | | - | | |
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| ctgattacat | ccatacctcg | taataacaat | gttaatacct | cagagagaaa | aaatgtcact | 120 |
| aaaaattacg | ttacttgaat | taatgggcat | cactatattt | gttggtatta | acacaaagca | 180 |
| cagtcactga | aacagaccaa | gttaaataat | agtgacacca | aattacactc | actacttgtt | 240 |
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| cgtacggatg | | 055000000 | ggtatgttga | tggcgtctat | tcgtcgcgga | 60 |
| | gcttccggat | | | gaatcaagtt | | 60 120 |
| atccttccgg | | caacttgatc | cgtaagctac | | gatccgtaac | |
| | atcaagttga | caacttgatc | cgtaagctac ccggatcaac | gaatcaagtt | gatccgtaac | 120 |
| | atcaagttga tgcatcggct | caacttgatc | cgtaagctac ccggatcaac | gaatcaagtt | gatccgtaac | 120 180 |
| ttttggtatt | atcaagttga tgcatcggct | caacttgatc tccgtaagtn tttgcatttt | cgtaagctac ccggatcaac | gaatcaagtt | gatccgtaac | 120 180 240 |
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nggtggtcga attcataggc aacactatat tctggtggtt aaatttaatt atcacaggtg

| ccaccttacc | acaatattac | aaatattaag | tgcaataaac | cacatatata | gtgcactaca | 360 |
|--|--|-------------------|------------|------------|------------|-----|
| ttccaacact | tgatatatta | cagaatttct | act | | | 393 |
| <210> <211> <212> <213> | 1294 351 DNA Glycine max | ζ | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| gcttnctaga | cgcctactnt | agatacaact | agatcagaat | gcatcctcca | cacgaggaga | 60 |
| aaatggcatt | catcattgaa | gatgccaact | tttgctatag | ggtcatgcca | ttcagcctaa | 120 |
| aaaatgcagg | cacaacataa | caacaactaa | tggaccgagt | cttcaaacaa | cagataggac | 180 |
| aaaatgccga | ggtatatatg | gacgacatga | ttgtcaagtc | tcaaactata | ccccaacatg | 240 |
| tggtggacct | ggaagaagtt | ttcggggaac | tacgaaaata | cgacatgcgc | ctcaaccttg | 300 |
| aaaaatgcac | tcttggggta | ggcaaccaca | agtccctcac | tacagcactg | g | 351 |
| <210> <211> <212> <213> <223> <400> | 1295 501 DNA Glycine max unsure at a | k all n locat: | ions | | | |
| | | taaattagga | ctttctctca | gctgtcacac | tecetetatt | 60 |
| - | | | · · | caaaaggcta | | 120 |
| | | | | ccttgctaac | | 180 |
| | | | | atcgtgtaat | | 240 |
| | | | | gtctatccta | | 300 |
| ttaatttcag | cccaaaatga | aggatgacga | atggataagt | gagctntcct | aagttgtaga | 360 |
| gtgataaaat | ataatgcaaa | aggctaataa | aagttggacc | agataataag | gattagattt | 420 |
| atatgactta | caadaacctt | actaatatac | gatcaataaa | tatctccata | atgacattct | 480 |
| | caagaacccc | gccaacgcac | gaooaacaaa | | acgacaccc | |

| <210> <211> <212> <213> | 1296 343 DNA Glycine max | | | | | |
|-------------------------------------|--|----------|------------|------------|------------|-----|
| <223> <400> | unsure at all n 1296 | locatio | ons | | | |
| aagtttgaat | atgatgtata agaa | aatgaa 1 | tgtgaacctt | tctccccttt | gaaagacttg | 60 |
| taaaaaaaat | gttttaaaaa tact | tttaat 1 | taatatctga | atttttttc | cțtattagta | 120 |
| tatatgtgag | gggtagaggg tgtc | acatcc 1 | tgcagcaaat | aatgtgcaat | atcataaccc | 180 |
| ctaaactgta | tatatcaact ttgg | caatta 1 | ttggtgcact | ttntagccat | tcaggtgcca | 240 |
| tgtaacctat | tgttcctttt aaat | tagtgg (| ttgttctagt | ttggtctttg | agtaatagct | 300 |
| tggaaagcca | aaaatctgca atct | ttgttg (| tgtgattggc | atc | | 343 |
| <210> <211> <212> <213> <223> <400> | 1297 468 DNA Glycine max unsure at all r | locati | ons | | | |
| | tataggagtc ttca | caactt (| gccagcttca | cctatcatta | aagagcaacg | 60 |
| | tagaggtgaa agag | | | | | 120 |
| | tggcaggtgg ggac | | | | | 180 |
| | tgacatctnc acta | | | | | 240 |
| • | caataaccaa ggta | | | | | 300 |
| | aagtaccccg acca | | | • | | 360 |
| | aggaggcacc ataa | | | | | 420 |
| | ccatcatggg ttgc | | | | | 468 |
| <210> <211> <212> <213> | 1298 60 DNA Glycine max | | | | | |
| <400> | 1298 | | | | | |
| gagcttgagt | ctgatttata tatt | acatat | catgtagtag | tatctgtgcg | tgagacctát | 60 |

| <210><211><212><213> | 1299 131 DNA Glycine max | ζ | | | | |
|-------------------------|-----------------------------------|-------------------|------------|-------------|------------|-----|
| <400> | 1299 | | | | | |
| atccaattca | atatcctacg | aaataatgca | tcaatagagt | atatgcaatc | tatcataatg | 60 |
| acaagttaat | gggaacgaac | taccaatcag | taatttgcat | agaaaagaca | tcatctgagt | 120 |
| cctaactagg | a | | | | | 131 |
| <210> <211> <212> <213> | 1300 438 DNA Glycine max | k all n locati | ions | | | |
| <400> | 1300 | | | | | |
| catatgtacg | actacggggc | cgttcgccac | ggacgaccag | aaggcttcca | gatccacaag | 60 |
| gcgccgcaaa | taccaacaaa | gtctgatggc | cacctccaac | tggactaacg | gactcccacg | 120 |
| tagcccatat | cctcgtnata | tctccacccg | ggtccccatc | aaatctacca | aacgttcaca | 180 |
| acatccaatc | agaacaacat | gcatacagca | catgctatca | caggcaacca | aaacagagca | 240 |
| catgcagaaa | actctgctca | acacaacaac | caaaaacaca | gctcttctct | cttaaggacc | 300 |
| acagcaacaa | tctcctccga | tccaacacgt | aaaccggtgg | aacgactccc | aaattatact | 360 |
| gggaggtcta | tatggcacaa | ggcctacttg | gtgaccgttg | ggagcagaca: | gcaaacatca | 420 |
| cgaacacatt | acgtgccg | | | | | 438 |
| <210> <211> <212> <213> | 1301 167 DNA Glycine ma: | | | | | |
| <400> | 1301 | · . | | | | |
| aaccactgtg | aggttatcca | ccacaatgat | gttaccaaat | ccagactcaa | actcgagatt | 60 |
| cttctcctgg | taaaccacct | cgtcatcact | gtaaaaaaag | aaaagagtca | gaaaagcgca | 120 |
| cccctagggt | tccgtttcag | gggccagaac | ctgaaaaggg | cgaagta | | 167 |

| <210> <211> <212> <213> | 1302 341 DNA Glycine max | : | | | | |
|---------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| <400> | 1302 | | | | | |
| ctgtcaagga | gcttactagt. | tgggtatgtt | tcgtttaact | gacaaaagtc | acatattctg | 60 |
| tatacttgaa | gttttttta | tataaaattg | catattcgga | aaaaaattat | tcattctcat | 120 |
| tccttaaatt | tgatggttta | cgtgtatctt | ctgtttactg | attattaaca | aaatatttcc | 180 |
| cgatgagaaa | cagttaatga | ttgtcactct | ttcctttggt | tttttataca | agagacaaag | 240 |
| aactaattcc | caaatccaat | gaaagtagtt | aataaattta | caattctaat | ggcaattgta | 300 |
| attattaatt | ccaatatatc | catataatta | agtgttctat | t | | 341 |
| <210><211><211><212><213> | 1303 315 DNA Glycine max | | | | | |
| <400> | 1303 | | | | | |
| ctgcagctaa | caagctgtgt | tatagagtgt | gtttggcctt | tctgactgaa | aaagcgtttt | 60 |
| aagaatcttg | agcttgacct | ttatactaaa | caagccaagc | gaagttgagc | cttaaatatg | 120 |
| ccgagccaaa | tgcccttgac | aagctgctca | ggtcatttcc | atccttaccg | acaatcacat | 180 |
| cgatagggat | tataacttcg | ataagggcct | tcttctcact | cttcctcacg | ctcgatatgt | 240 |
| tataatctcc | aaacttgagt | tgacaacaat | ggacacaaat | agcgggatgt | taagttagtt | 300 |
| ttacggggat | atcaa | | | | | 315 |
| <210> <211> <212> <213> | 1304 473 DNA Glycine max | κ | | | | |
| <223> <400> | unsure at a | alľ n locat: | ions | | | |
| tattaactct | atacaagagt | gaagctctga | taccacttgt | tagacaattg | gcctcaggta | 60 |
| tcttaaaaag | gggggtagaa | ttaagataca | caagctgtcc | cccaattaaa | atttaactgt | 120 |
| ctcttttatt | aacaatgcaa | tcctctatta | tgaattactc | taagaacaat | tcaaaaacaa | 180 |

| acttctttaa | agcaaaatat | aaacaataat | aaataataga | aatttaaggg | aagagagact | 240 |
|----------------|--|-------------------|------------|------------|------------|-----|
| acgaactcag | ttttatact | ggttcgacca | cagcctgtgc | ctacgtccag | tctgcatgca | 300 |
| acccgcttaa | gagttccact | atcttgtaaa | atacctttta | caaagtctga | agcacacatg | 360 |
| aacaaccctt | cccttgcgtt | caaaaacctt | acaacttaag | agaacatcgg | tactttaatc | 420 |
| aatctctttg | agtgagaata | agaagaagac | ttctctatnt | aggagaaaga | tat | 473 |
| <213> | 1305 433 DNA Glycine max unsure at a | k all n locati | ions | | | |
| | | 212121222 | ttatataata | tatttataga | tatttaatta | 60 |
| · | | | | tatttatgga | | |
| | | | | ctgattgtcc | | 120 |
| ggctatacag | attggtaact | tcatcatgag | aatcagtggg | atatgccttc | ttttaatgct | 180 |
| cgccagggac | caagctgttc | ctcacgggaa | tgaataacac | caatatgttt | tattgcatgt | 240 |
| tgtttcagtt | gacatttctt | caaagaaaat | gctaccaagt | gttgttataa | acaatacttt | 300 |
| cacggtcagg | aataataaat | atagaaaata | tggtagaaaa | caagaaanag | attaanaagt | 360 |
| aagtttaata | atcatcacaa | tctannaata | atttatatta | tcaactaaat | atcaaaatta | 420 |
| gaattgatat | aat | | | | | 433 |
| <210> | 1306 | • | | | | |
| <211> <212> | 455 DNA | · | | | | |
| <213> | Glycine max | x | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| gtgagtatag | caattgttta | tatagttagt | tctaaaattg | acatagcatt | tgcġagggat | 60 |
| tcaaccattt | tagctataga | acctctagct | gattatcctt | ccccatatga | aattcctcat | 120 |
| gctgattcaa | ctgaaccacc | ttcacaagat | aatagccctt | ctaatggctc | aactgaatac | 180 |
| attgagtțat | attcaatgct | attagaatat | ttcgatctga | ctcgttatgg | agtagtggtt | 240 |

gatgggagga cagattctag ctctgtaagc tcttgacttg cctctaagaa ctggagttat 300

| | • | | | | | |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| attaatttgt | aaaaataata | aagtgatgca | ttaaatgtcc | acatagatta | tttgagttaa | 360 |
| aatttcaatt | ttgattagac | aacaacaaca | caaaagcatc | aatagaactg | tatctgagtt | 420 |
| ntgtcaaatg | gcaattaatt | agcaactcgg | ggatg | | | 455 |
| <210> | 1307 347 DNA Glycine max | | | | | |
| <223> <400> | unsure at a | all n locati | ions | • | | |
| agctttcttg | agaaaacttc | cttgagaagc | ttctttgaga | naacttcctt | gagaagctag | 60 |
| agcttagcta | cacacacccc | tctcataact | aagctcacct | ccttgagaag | catccttaag | 120 |
| aagattcgta | aagaagctag | agcttagcta | cacatacctc | tctaatagct | aagctcacct | 180 |
| ccttgagatg | agaagctaga | gcttagctac | acacccccta | taatagctaa | gctcaccccc | 240 |
| atgacaaaaa | acatgagaat | aaaaaaagt | ccttattaca | aagacaactc | anaatgcccc | 300 |
| gaaatacaag | gctaaaaccc | tatactacta | gaatggccaa | aataaaa | | 347 |
| <210> <211> <212> <213> | 1308 449 DNA Glycine max | × | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| ttacagcaga | atttagtaat | gacccactaa | cctagaatta | aaataactta | atgccattaa | 60 |
| cctagggaat | taaaacaaac | taaatggctg | agtgtaactg | aaattgttgg | caaccaaaag | 120 |
| tcacccccaa | cagccaacaa | gtcagccacc | atttggtctc | ccaaaaggct | gatgcctatg | 180 |
| ttgccaattg | ggcccttatt | acaacttgaa | ctaaagccct | tttagttgat | taacccaaaa | 240 |
| catatttttg | gtcagccaac | tttacaagga | ttgggccatt | atttatacaa | actaaacact | 300 |
| ctaaaattga | aataaagtgg | tgtcatttag | tcctccattt | gggccatgat | acaactcaca | 360 |
| accttggact | tttctccttg | aaacttgngc | ttgtattcaa | atagtatgga | cagcacttgg | 420 |
| tgaagagncg | tcttggctct | ccttgctct | | | | 449 |

| <210> <211> <212> <213> | 1309 418 DNA Glycine max | |
|-------------------------------------|---|-----|
| <223> <400> | unsure at all n locations 1309 | |
| agcttcatgg | tgaatcaaga ttgattcata gagttttgat gataacaaag ataatgacaa | 60 |
| aaagctcaaa | agtcaagatc acttcatgat aacaaagatg atgacattca agaatgactt | 120 |
| caagattgag | tcaagaacac ttcaaggatt aagaggaaat ttgatttcaa gaatcaagat | 180 |
| tcaagaatca | agaataatca agatcaagat tcaagaatca agagaagact taatcaagat | 240 |
| aagtattaaa | aagtttttca gaacattgag tagcacaaga agttttcaca aaatcattac | 300 |
| taaagagttn | tactctctgg taattgatta ccagattata gtaatcgatt accagtggtt | 360 |
| ntaaaacgtt | aagattttca aaattcanat gaagagtcac atttgttgat gtgtaatc | 418 |
| <210> <211> <212> <213> | 1310 413 DNA Glycine max | |
| <400> | 1310 | |
| | acatttacaa tagacctcct caacctcagc agcaaaatca atcacagcag | 60 |
| aacaattatg | acctctccag caacagatac aatcccggat ggaggaatca ccctaatctc | 120 |
| agatggtcta | gccctcaaca acaacaacaa cagcctgctc cttccttcca aaatgctgct | 180 |
| ggcccaagca | gaccatacat tegtteacca atecaacaac ageaacagee ecagaaacaa | 240 |
| caaacagtta | aggeteetee gtaacettee etegaagaae ttttgaggea aatgaetatg | 300 |
| caaaacatgc | agtttcaaaa agagaccaga gcctccattc agagcttaac taattagatg | 360 |
| ggacaattgg | ctacacagtt aaatcaacaa cagtcccaga attctgacaa gct | 413 |
| <210> <211> <212> <213> <223> <400> | 1311 506 DNA Glycine max unsure at all n locations 1311 | |
| | gttagcgatc tagcacgcac ccagggatca tctgagncca cccgcatgca | 60 |

| tgcanacctt | aggcttgtaa | ttgctctcta | ttgttgcaca | gaagggcaac | agtctgtgtg | 120 |
|-------------------------|-----------------------------------|--------------|------------|-------------|-------------|-----|
| gtggtatgtc | gaagaacata | aaccacataa | tctggccacc | agtgcagatt | atgtgattca | 180 |
| tggctagttg | ggttaccagg | ttaaccaagg | caattagttt | accttccaac | tttttaagtt | 240 |
| actggtgatg | aacactgaat | tcgaggcaac | ttcactcact | cctctaatga | caataacatc | 300 |
| actactggca | ctaaattggt | gggagaatga | agcctcttct | caggaaaatt. | actgcttcaa | 360 |
| taggggacat | gacttcaagg | gctccaccac | tggcagcatc | tattatactt | gttttcgtgc | 420 |
| ttctgagtcc | ttcatggnat | attggatgag | aatctgctcc | catattggtg | agaggccaac | 480 |
| tgaccataat | cctcaatctc | tctacn | | | | 506 |
| <210> <211> <212> <213> | 1312 465 DNA Glycine max | ĸ | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| ttcacctgtc | tntacataat | cagagccatc | aacagacttc | ataaacatgg | taccagettg | 60 |
| agagttaata | gaaaaattaa | tgatgcatct | ttgtttccga | tcagtccatg | catcggacat | 120 |
| aatagtacaa | ccatacttga | cccattgctc | cctatggcct | ttcatcaaat | ttttagtata | 180 |
| ttcaacttcc | ttcttcaaga | gtggaactct | gatgtcatga | tagctaggaa | tgggcaaatg | 240 |
| tggcccatat | tgaccaatgg | ctgcaaccat | tttctcaaag | cttttcaata | taatgaggtt | 300 |
| gaatgacaaa | cttgcttggt | accaaaagcg | agcaatatgt | taatgcacct | ttcaatactt. | 360 |
| cattcttatc | cattgactct | cttatgttca | tttgcctcag | catctccatt | tttctccgat | 420 |
| tgattgcatt | ttctggattc | ttacaaaatt | atgccattgg | tcctt | | 465 |
| <210> <211> <212> <213> | 1313 512 DNA Glycine max | × | | | | , |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| catctattgt | atcctcatgc | taccaccatn | gatacantag | agcctgcctg | catgcatgca | 60 |
| atcttgagac | aacgttcatg | tttatcttgt | gtcgaagaac | taacattcgg | agcgagtagt | 120 |

| gcagtccaca | caacaatatc | cttgatggga | cttagatctt | acactggagc | tgcattttgc | 180 |
|-------------------------------|-----------------------------------|-------------------|------------|------------|------------|-----|
| attttccaga | attcgcagcg | gatgtaatca | tagaatatca | tacgaaaaga | tcatgagctt | 240 |
| acccaagata | actaatacga | acctacacgg | ccctctaaat | aactcacata | ttccttcaag | 300 |
| acgatatact | tgatattaaa | acaattcctg | attaataatg | ctgatgctta | tgcgacgtaa | 360 |
| taaaatgctt | ttatcctata. | ctattattat | cgacgatgaa | tctgccctca | cgtgtgaaaa | 420 |
| actgtgataa | tggcgaattg | tttcatcatg | atgttcgaaa | tcaagacttg | gacagtataa | 480 |
| aaaaagccga | ttaacgaccg | gagtcctttg | at | | | 512 |
| <210> <211> <212> <213> <223> | | c all n locat: | ions | | | |
| <400> | 1314 | | | | | |
| | | | | gtagttcttt | | 60 |
| ctatattata | tttgaataaa | aattctaaat | ttgtttttcc | attgccaact | tataccattt | 120 |
| caataaatac | ccttacaatt | tacactaatt | aaataacaat | gtaaaaaatt | ccaataatta | 180 |
| ttacataaga | tcattcgtat | aaaaanttga | caagtatcaa | cactaaattt | caaatgacaa | 240 |
| ttttattttt | gttttgattg | actatgtata | tgaagatatc | aaatgaggat | ttatatatat | 300 |
| aaaactaaag | caccttataa | tcttgaataa | catcattaac | taatatgagt | acatccttat | 360 |
| ttttcatttc | atacnagttg | ttttttaaca | catcagggtc | ggtctaataa | ggaaaggtct | 420 |
| gggtatccta | cacaagattc | t | | • | ÷ | 441 |
| <210> <211> <212> <213> | 1315 268 DNA Glycine max | × | | | | |
| <400> | 1315 | | | | | |
| ctaagctgaa | ttgaaaacgg | aagcttcgaa | gtctaaacgt | tcatagcctt | ttcagacttg | 60 |
| aagcatgggc | gaactggaga | gtgagaatgt | cataagtgat | gcatctttgt | ttccgaacag | 120 |
| tccatgcatg | ggacataatt | gcacagccat | acttgaccca | ttgctatcta | tggccttgca | 180 |

| tcaaagtttg | tgtatataga | aatttcttca | gcaacagagg | aagtcatatg | tcatgatacc | 240 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|------|
| taagaacaat | caaatgcgat | ccatattg | | | | 268 |
| <210> <211> <212> <213> | 1316 163 DNA Glycine max | c | | | | |
| <400> | 1316 | | | | | |
| tgatcttgaa | agatgaattg | gaggtttgct | catggtccaa | acaaaacttg | tatcagcggt | 60 |
| tatgcgaaac | agagaccaac | atgctagcca | ttgtcagcag | gtaccaagaa | gaactaaatc | 120 |
| tatccacggc | ccacgagcat | agagtggtgg | acgagtttgc | cca | | 163 |
| <210> <211> <212> <213> | 1317 392 DNA Glycine max | ς. | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| agcttcaaga | acattnttca | ctggtggtgt | ttacttcaac | ttcactagnt | agctctgcta | 60 |
| cacataatgg | cttgtctagt | gcaattactg | ctgctagtaa | aagtcctaat | gtagtttcta | 120 |
| attctgtaat | ttcatcccct | agcaatgtta | gcttgcggca | tgctaggctg | ggtcacccta | 180 |
| atagcccatg | tcatgaagct | agtcaatcat | tgtaacattt | cctcatctaa | taaaaatttc | 240 |
| cagacttttg | ctcctcatgc . | tatatgggaa | attctcacag | atttccttct | cactctttta | 300 |
| tttttgatac | tctcctttgg | agctttttt | atagacttgt | ggggccttct | cattaatttc | 3,60 |
| ctatgctgtt | tcanatacta | tgtcattaat | tg | | | 392 |
| <210> <211> <212> <213> | 1318 303 DNA Glycine max | × | | | | |
| <400> | 1318 | | | | | |
| ttctaccact | cctcaaggta | atagcactca | cattcccttt | tgtattgata | attggttgtg | 60 |
| ctggaatatt | tccagaacca | tgttgctgca | actaattgac | aattatagtt | aactctccaa | 120 |
| tctgagtctg | catgtcttgg | atggtggcac | aaacattcta | ttgaaactga | atgttgttag | 180 |

| tggccatttt | cttcattggc | tcctccaagg | aaggtccaaa | actgctattc | tgcataggtt | 240 |
|-------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| gtgcatatgt | aggtgtagac | tgccagaatt | gttggtgtct | aaatggagga | gctcggtatt | 300 |
| tga | | | | | | 303 |
| <210> <211> <212> <213> | 1319 227 DNA Glycine max | ς , | | | | |
| <400> | 1319 | | | | | |
| agcttgtaac | gccactggca | atggcgggat | ttagatgccg | tcattggcag | cagcgggatg | 60 |
| gggtatgact | caacttaaac | cgccagtacg | aatgctggga | caggctgatt | agtagagaca | 120 |
| gagtgaccac | tttacgccat | cgtaccttcc | gtcatcttgt | gactctcacc | tctctcctct | 180 |
| ccctcctct | gttcttcatc | tttcttttct | aaacctcttt | ctcttct | | 227 |
| <210> <211> <212> <213> | 1320 196 DNA Glycine max | ĸ | | | | |
| <400> | 1320 | | | | | |
| tggtcaggtc | ccattggtaa | tactgctagc | attagtgtta | caaagcagaa | gaaacacact | 60 |
| acaggtgatg | cattggattt | atcaaaatca | tataaaggtg | ccctcaagga | taaagttaaa | 120 |
| ggaaagaaaa | tcatagctta | gatatttagt | acattcttgc | agagttaaat | taagaaagaa | 180 |
| cctgtcccta | cttcct | · | | | | 196 |
| <210> <211> <212> <213> | 1321 337 DNA Glycine max | × | | | | |
| <400> | 1321 | | | | | |
| tgtttatatg | aagaggagtc | tagttatgga | cctttaattg | accctgaaac | ttttgagact | 60 |
| aaagttgttg | gaagcttcat | aagaatcaga | tgtgacccta | atgattacct | tcagaaaaac | 120 |
| tcacaccagc | ttttgcaagt | cacaggtaat | ttggctgctg | ttcgttgatt | atgacattgc | 180 |
| attcaagtaa | attcttttt | ccctctaaat | gtacacttca | ctttcaatag | gtatgttcat | 240 |

| caactgctta | agttgaatac | ttatgtttgc | tagaagcaga | ggttacaaac | aataaagcaa | 300 |
|----------------------------------|-----------------------------------|---------------------------------------|------------|------------|------------|-----|
| actgaaatgt | acttaattac | cttttttaca | tcattag | | | 337 |
| <210> <211> <212> <213> | 1322 440 DNA Glycine max | . | | | | |
| <223> <400> | unsure at a | ill n locati | ions | | | |
| agctatntct | taaagctttg | ctacaacctt | tttctcccc | tctggcaaca | tcaaaaagcc | 60 |
| gaagaactcg | ggaatcaaca | cagctataac | aatggagtag | caagatataa | gcatcagagt | 120 |
| attaaatata | ataagccaaa | ctcacaaaca | agaaataatt | aaaccagaat | ccaaataact | 180 |
| gaaaatgtca | acaaccacaa | aacatccaag | actgacgtgt | aaaatccaca | cgataaataa | 240 |
| gcaaagtact | tagcataata | atgtaaattc | taagaaacta | aaagccaaaa | tacacggctt | 300 |
| ataaaagata | aataatcata | acctaaaagc | taagaagacg | gaggaggtgg | tggaagatcg | 360 |
| aaactctgac | gaatgtagcc | gacatcctct | tcaagctgtg | taagacgaat | gttcataccg | 420 |
| gcaaagcgtg | aatctaacga | | | | | 440 |
| <210> <211> <212> <213> | 1323 457 DNA Glycine max | · · · · · · · · · · · · · · · · · · · | | | | |
| <400> | 1323 | | | | | |
| tgtagaattc | accccaatta | cagtgaccta | tgctgacttg | tctcccatat | ctacttgata | 60 |
| attcaatggt | agccataacc | ctagccaagg | ttcatcaacc | tccatttctc | cgagaatacg | 120 |
| actcgaacgc | aacgtgtgct | tgtcacggag | aagccccgga | gcgttccatt | gagcatggta | 180 |
| gggctctgaa | gcgtaaggcg | caaggtctaa | ttgatgcggg | ctggctgaaa | tttgaggaga | 240 |
| attgcgtgta | aatcctgaca | ttgacaagag | atgccacaca | tggggcaatt | ttgaaagctg | 300 |
| ttgttaggtg | tccctaatga | ctcatcaggg | tttccaagtt | tatgccatta | ttgtaaacca | 360 |
| cagctacaat | gttaaatgaa | acggataaag | ttgatatctt | tggtcctcat | cctctcacag | 420 |

acgcttgctt gcttattcaa ctctcatcgg aatgcgg

| <210> <211> <212> <213> | 1324 99 DNA Glycine max | τ. | | | | |
|----------------------------------|-----------------------------------|--------------|---------------|------------|------------|-----|
| <223> <400> | unsure at a | ill n locati | lons | | | |
| agcttggaga | ggatgcttca | atggaggaaa | tgaatgaggg | agagaaagag | agaggnggca | 60 |
| gcacgaaatt | gaaggaagaa | acacgtagag | cagctgttc | | | 99 |
| <210> <211> <212> <213> | 1325 246 DNA Glycine max | ζ | | | | |
| <400> | 1325 | | · . | | | |
| tcttatatga | ggtacattca | tggtggtgaa | gctccttctt | ccatggctta | ttccctagtg | 60 |
| gatggtgcct | cccctctcct | cttctccttt | gccttccgtt | gcatctccat | ggtgaaaaat | 120 |
| cagcattgaa | ggacctcatt | gaatctcaaa | gatccagcct | ccatagaaac | tccacaagca | 180 |
| tgcttccatc | aaggtgcctg | ggatgctaat | accttccccg | tgcgctacaa | ctcacaatcc | 240 |
| ctcatt | | | | | | 246 |
| <210> <211> <212> <213> | 1326 356 DNA Glycine max | ς. | | | | |
| <400> | 1326 | | • | | | • |
| taacaaatat | tcacaccttt | caaccaaatg | ttccctagtg | tggcaagatt | actcaagtgt | 60 |
| agaaacaaaa | ccatcgatac | ggctatattg | atatcattcg | tgaġtgcttt | ttaatactat | 120 |
| gagtacatta | atggagaaaa | tcaaactcat | tgtaaaaaca | tgtgaaatag | aatgatgcta | 180 |
| tgtgagatac | actcttctga | atgcagtgtc | cggctgaaaa | ttactaaata | ctatacaatt | 240 |
| .gagtgagtct | cacataacgg | tctaacaata | ttctccaaat | ttataatttt | caagcactac | 300 |
| taatatgcgt | gtataagagc | atatgtggag | cactcttcat | acatatatat | gtgatt | 356 |
| <210> <211> | 1327 450 | | | | | |

| <212> <213> | DNA Glycine max | |
|----------------------------------|--|-----|
| <223> <400> | unsure at all n locations 1327 | |
| agcttcttac | atagtccgct nttgcttgtt ctttatgctt aanaatagaa acattaggca | 60 |
| tagacaaaag | atcaagatga gttagtaggt taaaaccata aacaacttca aaaggagaac | 120 |
| aattagtagt | gctatgaaca actctattgt aagcaaactc aacatgtggt aaacaagctt | 180 |
| cccaagtctt | taagttcttc ctcaaaactg tcctaagcaa agttcccaat gtcctattaa | 240 |
| caacttctgt | ttgcctatca gtttgtgggt gacaagtggg tgaaaataac aatttagtgc | 300 |
| ccaacttgcc | ccacaaagtc ctgcaaaaat ggcttaggaa cttagagtcc ctatcactaa | 360 |
| caatgctcct | tggcanacca tggagtctca cacntctctt gaaaacaaat cagccacatg | 420 |
| ggaagcatca | tcaactcttt tacatggaat | 450 |
| <210> <211> <212> <213> | 1328 396 DNA Glycine max | |
| <223> <400> | unsure at all n locations 1328 | |
| tgcctgtccg | atgtagcagt aatgatggcc cgagttatgt tggngaacgg ctacgaaccc | 60 |
| ggaatgggtt | taggcaaaga caacgacggc atgactaacc tgataaatgc caaaggaaat | 120 |
| cgtgggaagt | atgggttagg ctataagccc actcaggcag atataaagag aagcatcgcg | 180 |
| ggaaggaaga | gcggtagtca aagctcgtgg tcgagacaag aaggtgaagg aagcccgccc | 240 |
| tgccacataa | gtagaagctt tataagcgcg ggtctggggg acgaaggtca agtggtcgcg | 300 |
| atatacgaag | atgatgttcc gagtacattg gatttggtac gaccatgccc tcctgatttc | 360 |
| tagctgggaa | attggcgagc ggagtgtcat acccta | 396 |
| <210> <211> <212> <213> | 1329 504 DNA Glycine max | |
| <223> | unsure at all n locations | |

| | | | • | | | |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| cgacacgatt | gggccgttcg | tcgcagagaa | nctntanagt | ctactcgcag | gcatgcacgc | 60 |
| ctacattatg | ggcatctggt | ccctcaacat | tctctgtcat | tagaatctaa | ggaaaagatg | 120 |
| aaaggatggc | agctggtggt | gcaaaaaaaa | aagggaccac | ccctgctggg | gacctggttt | 180 |
| ntcctgcccc | taaaaaatta | actatttggg | cattcacatt | ccaacatttt | cttttaatat | 240 |
| acgccaagtt | gatgaccggg | ctcaggcttc | tataaaaagt | aagagcatca | gatcccactc | 300 |
| ttcttggcct | gcacaaggct | atgattaaag | ctgggacgcc | tacgcgagaa | gagtggaatg | 360 |
| agccataatg | ttatctatca | nagatcaagc | cgccaatgtc | atgtcattct | tggactaacc | 420 |
| ataaccaact | actctgtcat | atcaagtctg | agtgtggagg | atgattatgt | tgaagaaaca | 480 |
| gacactcatg | tctggcatgt | atag | | | | 504 |
| <210> <211> <212> <213> | 1330 518 DNA Glycine max | x | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| ngaagtgctt | gattactgac | ctctgatact | cagcttgaag | actccgctcc | gattgaaggg | 60 |
| ctcctctcgg | tgtggtgttt | caacggagaa | caacggaggt | ccatggaagc | tactggttit | 120 |
| tgtgggtggt | gaagaagaag | ctngngacat | tgnggaaggg | ttttggaaga | aagaaagaga | 180 |
| aaggaatggc | tgtcaaggct | acacganaaa | caagacttga | aacactcaag | tgtttctgct | 240 |
| gttgggaaaa | gagaagtttc | tcacacaacc | gaagacatat | cacagatege | aacggtcaga | 300 |
| tcgtggacat | ctgtcctctg | aactttcaga | ctanatttcg | agacgatcca | acggttaacg | 360 |
| aatgtaggag | ggcactttta | ccaagacagc | tttcttgaca | agctttctcg | tgagggcttc | 420 |
| ttgagaagct | tcttgaaggc | ttcttgagaa | ctagagttta | actatcacac | cccttaatac | 480 |
| taactacctt | ctaaaataaa | catgataaat | acacacan | | | 518 |
| <210> <211> <212> <213> | 1331 389 DNA Glycine ma | × | | | | • |
| <400> | 1331 | | | | | |
| gcttgagaat | ggagaattgc | actaagcaat | cactacgcat | agctccaaac | tcgaaggtgg | 60 |

| aggacacatg | aacgaaaaca | caattcatgg | ggctccgaaa | aaggggttga | gaatggagaa | 120 |
|-------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| ttacactaag | caatcactac | gcatagctcc | aaactcgaag | gtggaggaca | catgaacgat | 180 |
| aacgcaattc | atggggctcc | gaaaagattg | agaatggaga | attgcactac | gcaatcacta | 240 |
| cgcatagctc | caaacgcgaa | ggtggaggac | acatgaatga | acacgcaatt | catggcgctc | 300 |
| cgaaaagatt | gagaatggag | aattgcacta | agcaatcact | acgcatagct | ccaaactcga | 360 |
| aggtggagga | cacatgaatg | aaaacgcaa | | | | 389 |
| <210> <211> <212> <213> | 1332 462 DNA Glycine max | ς. | | | | |
| cttcacaaat | aatcatcaca | cagcagagaa | ctaacaaaac | tacccctcat | atctcccaaa | 60 |
| | | | | caaacctgga | | 120 |
| | | | | tcctttcgcg | | 180 |
| | • | | | tggagaatgg | | 240 |
| • | | | | gttctggctg | | 300 |
| | | | | tttctattat | | 360 |
| | | | | cactatctct | | 420 |
| | | agtgagaaca | | | | 462 |
| | | | | 3*** | •• | |
| <210> <211> <212> <213> | 1333 451 DNA Glycine max | × | | | | |
| <223> <400> | unsure at a | all n locat | ions | | | |
| agctntgcaa | taaagttaag | gcagcaaacg | atagagaaat | gttagattnt | aacttgcgtt | 60 |
| gactgtacca | tctcaacaat | atgttttcac | taaattctat | gggcagcgga | atactcttgt | 120 |
| gcataagtta | ttgtcaaaca | aacctgaaat | atattcctta | tggaccttat | cgcaatatat | 180 |
| taataattta | tttccagaac | tgttaaaaat | tgatttaaca | taatattact | gtagaagcct | 240 |

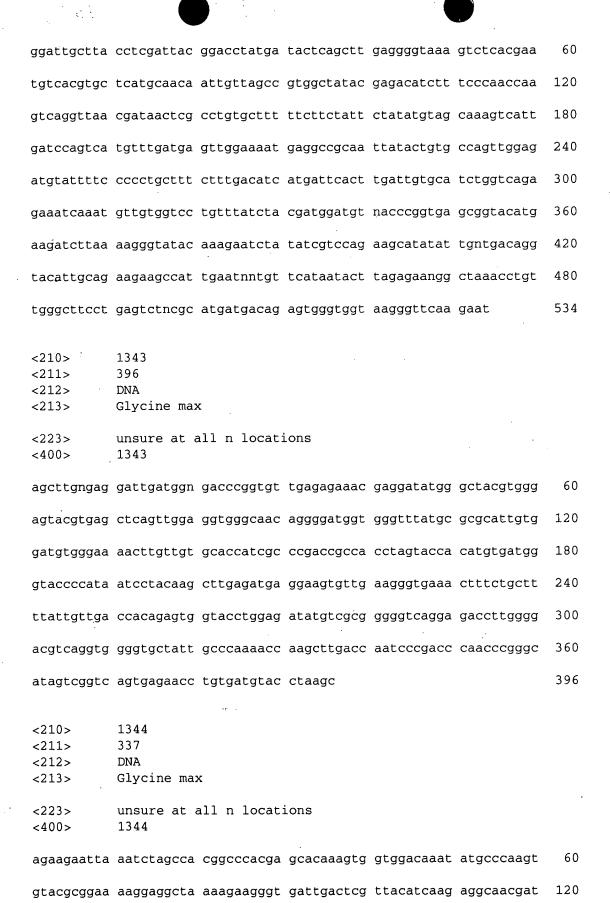
| cagatatgaa | agaatgcttc | tcatttcaac | aaataaactt | ataggttttc | ccttaaccaa | 300 |
|----------------------------------|-----------------------------------|-------------------|------------|------------|------------|-----|
| aagcgtaata | aattctaata | gcttatgttg | atataaagat | ttggagtttc | agccatgaat | 360 |
| ctattgcatt | tttaagggac | catcgtgaaa | tttttttca | caacgtgttg | cccttaaaga | 420 |
| cagttcanaa | tcgtcgtaga | agacttctaa | t | | | 451 |
| <210> <211> <212> <213> | 1334 431 DNA Glycine max | k all n locati | lons | | | |
| <400> | 1334 | | | | | |
| agcactcana | ccgagtgacc | ctcaaggcct | acactctgaa | gagtctgtca | gggcctctcc | 60 |
| ctcccgattc | aggtccaacc | tagaaaatat | tttagcacac | atactctata | tatgaactgt | 120 |
| acaaaacaca | tgactcctca | attgttctca | aaatagtttt | aactcgtcgc | ccttaaagag | 180 |
| tcttatagtc | gtgtgattgt | acaattcata | gttcataact | caatgcacac | aacatctcaa | 240 |
| tcacgtgcat | actcagttta | tcacatacac | tgaatctcaa | tcacaatggt | ataatctcaa | 300 |
| tttaacacgt | tatcacactt | catgaatcat | atacacttta | cctatgaacc | atgcaataca | 360 |
| cagaattact | caattatttt | canaacccat | ttaactcgcc | gggntcccac | agtggatctc | 420 |
| atcacatact | С | | | | | 431 |
| <210> <211> <212> <213> | 1335 438 DNA Glycine ma: | × | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| agctnttcta | anagatataa | ctcgtctgaa | tgactttctt | gaccagacat | gaagagtcta | 60 |
| taaaagcaag | gctttgtttt | gcatattaaa | tcaattattc | caagtctttc | taacaatctc | 120 |
| ttacaatcct | ttacaagcct | tgagtctctt | tgaacttctt | cttctttgta | ccaaaagttt | 180 |
| tctgaagttt | tctggttttc | taaaccttga | aaacttgtgc | tattcatcct | tttcattctc | 240 |
| ttctcccttt | gccaaaaaga | attcaccaag | gactaatcgc | ctgaattctt | tttgtgtctc | 300 |
| tcttctctct | tttccaaaag | aaggaaggac | caaccgcctg | aattcttttg | tgtctccctt | 360 |

| ctcccttgtc | aaagaattca | aaacgacaca | gtctgagaat | tcttttgatt | cttcccattc | 420 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| cctaatacaa | aagcgttc | | | | | 438 |
| | 1336 340 DNA Glycine max | ζ | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| ctgcatatct | aacaatcgtg | gntttaaatt | gctgttgtcg | ntgcgatcct | tgacattgcg | 60 |
| tgaaaatgtg | tctgtcatga | tttggttgca | gagaatcgta | aaatctttat | gttgcggtcg | 120 |
| caaatgtggt | tatatatgga | tcatgattta | aaaccatact | aacaattttg | cgctgtgtgt | 180 |
| ttatcaatcg | attaattgat | gattgaatgt | gaaaattaat | agaagttttt | ggcaatgtac | 240 |
| ggcaatgaga | ggctccaaca | actcaagaag | gggcttatca | aaccaatacg | atggtccatg | 300 |
| caaggcgaca | aaccccattg | acaaatgttg | gagatgtgac | | | 340 |
| <210> <211> <212> <213> | 1337 431 DNA Glycine max | ζ | | | | |
| <400> | 1337 | | | | | |
| tacccatcac | atatggtact | aggtggcggt | cgggctatgg | tgtcttacaa | ttctgcacat | 60 |
| tcacaaatca | cgtataaacc | caccatcccc | tgttgcccac | ctccaactga | gctcacgtac | 120 |
| tcccacgtag | cccttatcct | cgttcctctc | aacgccgggt | ccccatcaat | cctctcaagc | 180 |
| tcccacaaca | tccaagagat | tcaacatccc | atcatcacaa | actaacaaaa | ccaagcacaa | 240 |
| catggcagag | gcagaaactt | tgcccaaaac | acaactcaaa | atcacagctt | ttcacataca | 300 |
| aataccccag | taaaaattcc | ttcattccaa | ttcgttaacc | gttggatcga | ctcgaacatt | 360 |
| ttactacgag | tctctagtac | ataagtctac | attatgaccc | gtgtgatctg | ctagcaaaca | 420 |
| tatagaactc | a | | | | | 431 |
| <210> <211> <212> <213> | 1338 421 DNA Glycine mä | x | | | | |

| <223> <400> | unsure at all n locations 1338 | |
|-------------------------------------|---|-----|
| agctatacat | anattttctg gatttctaaa ccttgaaaac ttgtgctatt cataggtatc | 60 |
| attcccttct | ccctttgcca agaagaattc gataaggact aactgcttga attctttttg | 120 |
| tgtctctctt | ctcccttttc caaaagaaca aacgactaaa agcatgaatt cttttgtgtc | 180 |
| tcccttctcc | cttgtcaaag aattcaaaat gacatagtcc gagaactttt ttgattcttc | 240 |
| cctttcccat | atacacaaag acttcaaagg actaaccgcc tgagaattct tccctttcac | 300 |
| aaagttgcaa | aggtttaacc gcctgagatc tttgtcttaa tacattggaa ggtatatcct | 360 |
| ttgtcggaca | agcagaaggt acatctactt gggttcgact gagaacaaga gaaggtacat | 420 |
| С | | 421 |
| <210><211><211><212><213><223><400> | 1339 529 DNA Glycine max unsure at all n locations 1339 | |
| | gaatcctttc tagtacccgg ngatnctnta aaagtcaact ggaagcatgc | 60 |
| cagcttggaa | gaacccgggt agtccaagag ataattttat gtcataccct tcaagtcttg | 120 |
| aaagagtatg | atgaacttag ggacgtctat atggccacag cttgaacctt ggaacgagaa | 180 |
| acccagaagg | cccgaaagga agaacaccac ccaagcaaaa gtttgagggg ctttataggg | 240 |
| cagcaatact | gageteaage teegaagagg tgaaaggaaf cateaegggt caaaggeatg | 300 |
| atcttgaagg | acgagctaaa ggtttgcctt aggtcgaaaa gaaatttgtc ccaacagtta | 360 |
| ggcgagactg | aagggaatat gtgggccatc atcgataagt gcaaagagaa gcttaatcta | 420 |
| gcggcgactc | acgagcanag gctagaggat gagtaccgcc agatatcanc agaaagggga | 480 |
| agcagggaaa | gggtaattga ttcattgcac cagaggaaca atgaggatg | 529 |
| <210> <211> <212> <213> | 1340 533 DNA Glycine max unsure at all n locations | |

| <400> | 1340 | | | | | |
|-------------------------------------|--|------------|------------|------------|------------|-----|
| nnccttttga | tgccatgtan | tnctgacctt | agatactaag | cttgacattg | ntgttngata | 60 |
| gaagaagaag | aagatggtta | gccttggtat | ttcaatatca | aacgatacat | caaggacaag | 120 |
| gaatacccgc | ttgaggcctc | taacaatgac | aagaggatat | tacggnggtt | ggcggccagt | 180 |
| ttctatctga | gtggggatgt | cctatataaa | agaaagcatg | atatggtatt | gctctggtgt | 240 |
| gtgaatgtaa | atgaagccga | gcagatacta | acagaggtgc | atgaaggatc | ctttggcacc | 300 |
| catgccaatg | ggcatgccat | ggctcgaatg | attctaagag | cctggtgtta | ctgtatcacc | 360 |
| atggagaatt | atttgtgtgt | tcacgtcang | aaatgccata | agtgccanac | ttttgcagat | 420 |
| aatgttaatg | gctccacctg | taccattgat | gtgtttgcaa | tgcatggctg | ntctcgatgt | 480 |
| ggaagaataa | cgtgattggg | gctatcanac | ccaaagctct | cgatgggcat | ctg | 533 |
| <223> | 1341 433 DNA Glycine max unsure at a | | ions | | | |
| <400> | 1341 | acctatcaca | tataatacta | ggtggcgcgc | gggggatggt | 60 |
| | | | | caccatcccc | | 120 |
| _ | • | | | cgtttctctc | | 180 |
| | | | | acaacattca | | 240 |
| gctatcacag | ccaagcaaaa | cagagcaaag | gcagataact | ctgctcaaca | caccaaccaa | 300 |
| aatcacagct | tttctcactt | acagacccca | ataataattc | cttcgatcca | attcactaat | 360 |
| ccgtggatcg | actccaaaac | tgtactggaa | gtctacagtg | cataacccta | cattgggacc | 420 |
| gttgcgatct | act | | | | | 433 |
| <210> <211> <212> <213> <223> <400> | 1342 534 DNA Glycine max unsure at a 1342 | | ions | | | |

:(;,



| gtggatgtga | ccgattgctc | ttactttgaa | cgagagtcaa | gaactttccc | gattgctggc | 180 |
|-------------------------|-----------------------------------|--------------|------------|------------|--------------|-----|
| caaggccaaa | gcaatggcag | acgactactt | cgccccgag | gagatccatg | gactcctcag | 240 |
| ctattgtcag | catatgatag | acttaatggc | ccatataatt | aggaaccgct | aaggagtntg | 300 |
| tattgtcact | cagatcttga | ttagttataa | ctttctg | | | 337 |
| <210> <211> <212> <213> | 1345 437 DNA Glycine max | ς | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| agctntcata | agtgaagtca | ggtgcagcca | tctccctaag | attcctctca | cgaggtggag | 60 |
| attgagccat | gttctcagta | tgaaaattag | cagccgaatg | ctcaaaatta | gaatgttcag | 120 |
| aatcaccagc | aatagaatgc | tcaaaatgca | tagaatgatc | aggatgaaca | ctatgcctaa | 180 |
| ctaatctatg | aaaggtttta | tcttctattt | caagatcaaa | gggttgtaaa | tcacctggat | 240 |
| tgcccctagt | catgcactat | atgcagcana | tcatgtattt | ctcaaacaag | caccaaaggg | 300 |
| ggtaaaacta | caactatact | caaacaatat | ccaaatgagc | tgaanatnta | tgagaaacac | 360 |
| cctataatca | tgaaaagata | gacaaaaatt | ttcagacaaa | nattcaaagt | ctaactatga | 420 |
| aaactgccta | agaaaag | | | | | 437 |
| <210> <211> <212> <213> | 1346 388 DNA Glycine max | × | | | . | |
| <400> | 1346 | | | | | |
| ggagcttcta | tggaggatgg | atctttgagc | ttcaatgtgg | tccttcaatg | gtgagtattc | 60 |
| accatggaga | tgcagcggaa | ggcaaaggag | aatatgagag | gggaggcacc | atccactacg | 120 |
| gaataatcca | aggaagaagg | agcttcacca | ccaagaattg | ccatggataa | gaagcttgaa | 180 |
| gaggatgctt | taatggagga | aaagaaagag | agaaggggg | agcacgaaat | tgaaggaata | 240 |
| aaagagggag | agaagtggaa | ctttgaagtg | tgtctcataa | gactctcatt | catcaaagtt | 300 |
| acaacaagtg | ttacacatgc | ttctatctag | agactacgta | gcttccttga | gaagccttct | 360 |
| taagaagact | ttcttgagaa | gacttctt | | | | 388 |

, . .

| <210> <211> <212> <213> | 1347 485 DNA Glycine max | | | | | |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| <223> <400> | unsure at a | all n locati | ions | | | |
| ggttgaaata | gccatgttgg | atgagttata | catacttatt | atgttctacg | gcttatgtga | 60 |
| tgatgtttgc | gatgtttata | tgctgaaatt | gctgatggaa | aactattaga | gatgacaggt | 120 |
| agaactaacc | tagggttata | aagtgagaat | gtgatgctat | gagtggaaaa | agagtgaggc | 180 |
| tttgagagtt | ggaacgataa | gtctgaattc | tgtggtnaat | ggaggttaaa | gtgagttaat | 240 |
| actagctcga | aatgtcattt | atgacttatg | acaaagcttg | gactgtgcta | gagagaagaa | 300 |
| ctaatgacca | aagtgaacca | agagccatct | ctatggcgaa | catgggtgtc | gagggcgcaa | 360 |
| attttgattc | ggtggagatt | tcggtgacat | tcagtttgag | caagtttaga | attgatgtat | 420 |
| ggactagcgt | gatgtgagag | tttgcttcaa | gttaccttat | tctacatgtc | acttttgaga | 480 |
| cctat | | | | | | 485 |
| <210> <211> <212> <213> | 1348 440 DNA Glycine max | ς , | | • | | |
| <223> <400> | unsure at a | all n locat | ions | | | |
| agcttctctg | aagcatggga | tgagacaaga | acttagaana | ttctcagtca | tccaactcgc | 60 |
| | tcatgcacta | | | | | 120 |
| | ctaacccccg | | | | | 180 |
| ctaagcctaa | aaacctctcg | ggttgtgcat | ttaattgaat | agggctaagc | gagtcagctc | 240 |
| gctgagcgcg | acatagtctc | tcgctaagtc | tgtctgtgcg | ctaagctcaa | aaggctctct | 300 |
| acctggacct | tcatggaaat | tgggctaagc | gggccatccc | gctaagccca | aaaccctctc | 360 |
| tggaatggca | acagcaataa | gcgagaccat | ctcgctaagc | gtaaccccac | tactgcatca | 420 |
| agagaac <u>tt</u> t | aatccgctga | | | | | 440 |

| <210> <211> <212> <213> | 1349 435 DNA Glycine max | • | | | | |
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| gctggcttgc | tggctcctgc | ttcaattggt | gtggctcttg | cttcaattgg | gtgcttactg | 60 |
| actggttgct | tccttcgctc | aagtgtgtgc | ctttaccccc | ttactcctag | taagtgtttt | 120 |
| taaagtaaat | aaaatttata | tatttttgtt | aataaatatt | 'ataagtttaa | gttagctagt | 180 |
| attaacacat | attgtaagtt | agtttatata | gtattgtgta | gttattctaa | gctagtatta | 240 |
| acaaaaatac | taagtttaag | ttagttagta | gtagtattgt | gtagttattt | tttacgtatt | 300 |
| aatattaata | gatataccaa | tggtaggtta | gttactatga | aaatattatt | tggttagtta | 360 |
| gaatgaaaat | tttatttagt | tattgcátga | tctaactata | tgtgtgatat | atctatatat | 420 |
| atctatatat | atata | | | A | | 435 |
| <210>. <211> <212> <213> | 1350 532 DNA Glycine max | c | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | · | |
| cggctctgat | tgattccttg | ccgtcntcga | gactctctaa | agtcaccctg | cagcatggca | 60 |
| gcctggtcgg | ntcaatttta | attaagcgct | tgttacattc | ctatggactg | agccaaaagg | 120 |
| ctcgggtcat | taaagactac | gcatctttta | aggcaccaag | caagggatta | aacagcgaaa | 180 |
| cccctatccc | acattcttta | aaagaatgcg | aacagaaaat | tatagaggac | aggaattcct | 240 |
| tgcgggggg | aaccacaaaa | aacaaaagca | tgtggtgact | tttttaattg | ccccaagtct | 300 |
| taagcgtagt | atcgcttgac | aacgtcggag | ttcacgggtg | aaggtagttc | ctcgtcatcc | 360 |
| atgttggcga | gcacaagggt | ccctccggag | aaagcccttt | ttacgacgaa | aggccctt.cg | 420 |
| tagttcgggg | cccactttcc | cctatngtct | ttcagggctg | gggagacttt | cttcagtacc | 480 |
| aggtcccctt | cgctgaacct | gcgcgagtgt | accttcttgc | aaacgcgttc | tn | 532 |
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| <213> | Glycine max | |
|--|--|-----------|
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| aatgctatta | cggccttgaa actcagcttg aggattatgg ngtacccatc acatgtggta | 60 |
| ctaggtggtt | gtcgggcgat ggtgcacaac aagttttcct catccacaat gcgcgcataa | 120 |
| acccaccatc | ccctgttgcc caccgccaac tgagctcacg tactcccacg cagcccatat | 180 |
| cctcgtttct | ctcaatactg ggtccccatc aatcctccca agcttccaca acatccaaga | 240 |
| aaaacaacat | tcaaacagca caagctatca cagccaagca aaacagagca aaggcagaaa | 300 |
| actctgctca | acacaccaac caaaatcaca gcttttctca cttaaagacc ccagtaacaa | 360 |
| ttccttcgat | ccaattcgtt aaccggtgga tcgaactcca aaatttactg gaagtctata | 420 |
| gtacataagc | ctacattgtg accgntggga tctactagta nacatncaga actcattctg | 480 |
| cactactctt | ntcacagnca accacaca agcacttntc ttgcacaagc c | 531 |
| <210> <211> <212> | 1352 146 DNA | |
| <213> | Glycine max | |
| <213> <223> <400> | Unsure at all n locations 1352 | |
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| <223> <400> agctntagca | unsure at all n locations 1352 | 60 120 |
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| <223> <400> agctntagca agaatctctt | unsure at all n locations 1352 gataanatat attacaagca ctatagaatc catgtacaac atagagaagc ttcaatagaa aaacggaggc gaacttatcc tccnccacta ataatanagt | 120 |
| <223> <400> agctntagca agaatctctt atttgatcag <210> <211> <212> | unsure at all n locations 1352 gataanatat attacaagca ctatagaatc catgtacaac atagagaagc ttcaatagaa aaacggaggc gaacttatcc tccnccacta ataatanagt atttcagaaa gctcat 1353 484 DNA | 120 |
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| caattaaatt | tgttacaact | tttcatcaga | taatttaaat | ttgaatccga | tgattaatat | 300 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| tcgatggagt | acaatgtcaa | ctatttgaaa | ttaagaagca | acctanaaac | aaaaagaagc | 360 |
| aatctccttg | ctaatttcgt | gggagtagtt | tcgaacgttg | tagttggtgt | ttggttttgt | 420 |
| ttgtttttct | ttggaatgca | taaaaaacaa | atatcaattt | ccacattaaa | tatcaacacc | 480 |
| tcat | | | | | | 484 |
| <210> <211> <212> <213> | 1354 453 DNA Glycine max | κ | | · | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| agcttccacg | aaggagatcg | aagagagaag | acttggtagt | ttaaataagg | tttgaactta | 60 |
| ataggatggg | tgtacccgcc | acaactgcat | atttaagaga | aagaaccgtg | ctatatatac | 120 |
| cttgtcttgg | ttcctaatgc | tatatctttg | gggtaatggc | taaataatta | ataaatataa | 180 |
| tttttttaat | gggtagtaaa | caagtaattt | tattgtcagc | ctgtgagaac | agaataataa | 240 |
| aaacaaaaaa | agtacagtca | actttagttg | agtcgctagt | cttgaatctt | aattacccac | 300 |
| gactcttctc | atcttccaag | ttccaactac | ctgtgcaatg | catgccgtcg | atgttcagaa | 360 |
| taaatcataa | tctgctattt | ttggattacc | ctctctcctt | agtatacaat | ntaaagtgat | 420 |
| gatattatat | aacttttaaa | ttattattga | ata | | | 453 |
| <210> <211> <212> <213> | 1355 445 DNA Glycine max | × | | | • | |
| <400> | 1355 | ٠ | | | | |
| tgcatacaag | tagtattagt | attttcttcc | ttcaccagtc | aaactatcct | cggtttattt | 60 |
| gctcgtgatt | gcccatgcat | gaaaaggggg | ctgttggaag | ggtggcgatg | ggttgatcat | 120 |
| tcatgtcgga | tgagttttgg | taatggttgt | agaaaccgta | tggtcaggag | agaatcttgc | 180 |
| ccctcatttc | aagctatact | tctctctctg | cttatagtgg | gcttggtttt | cttggtcaaa | 240 |
| tatattttct | agttggtaat | acaaatatat | ataattttct | catttgtatt | tattttgatt | 300 |

| tgattcccag | taggataatg | ttttgttgtt | gttgttgttg | tggtacctat | tttgattgga | 360 |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| tgtaatgcat | tgctagagct | aaaccccgta | gcagatatta | aggaatcaaa | gaatgatcat | 420 |
| gacatgagag | aagtaacagg | aaatt | | | | 445 |
| <210> <211> <212> <213> | 1356 403 DNA Glycine max | c | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| agcttagtaa | gtcatgtacc | tgtgttcctt | atggatgtgc | ttagtttatc | acctaagtgt | 60 |
| gagattgaga | atctagtagg | tctagtatcc | atagaaaatt | gtaaccgtag | ttcttggggg | 120 |
| atgtcttgta | tatagttatt | aagcgtagtt | gggaaagtta | tgaggagtag | ttaggaagct | 180 |
| tggtgtgaaa | ccttaagggg | agtgtaaggt | cattcgtaag | gagttgttgg | ttgcgtatag | 240 |
| agaggcttca | gagtgagtgt | tcttgcgtaa | ggtagatgac | ctacaggatt | agtgatgata | 300 |
| gtcgtatgtt | tagtgagata | gatcttagtt | ctccttacct | gttgatctgn | cgaaagtctg | 360 |
| aggatgctcc | gaggactacc | ttangacttg | ttgtagtctt | tat | | 403 |
| <210><211><211><212><213> | 1357 428 DNA Glycine max | · . | | | | · |
| <223> <400> | unsure at a | all n locat | ions | | | |
| agcttgttct | tgattntntc | taagttcttt | atcaagctat | gaacaatata | cttgaccttc | 60 |
| atttaactgt | ctttgggctt | ggcggccaca | ctcaacaaag | tattttcgac | acctactgta | 120 |
| cgctgatttg | accaacgctg | ttatgggaat | gttgcgacaa | tccttcataa | ccttattgat | 180 |
| acattctaac | aggttggttg | tcatgcggcc | ataccgaagt | ccttctctat | cataagacat | 240 |
| cgttcattct | tcttttgaaa | tgtgatcaat | ccatgttgct | atggctggac | tcagttcacg | 300 |
| aaattcttct | agattctgat | aaaaaatgtg | cttgcaagga | gtgtangctt | gatcatatta | 360 |
| gctatgaata | agaattttat | gtatatatta | aacttaaata | aacttgacca | tgaaatatga | 420 |
| aatottao | | • | | | | 428 |

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|-------------------------|-----------------------------------|------------|------------|------------|------------|-----|
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| caggggggaa | tttgcatttc | tcgaaccttg | atcttgctat | ctttagaagc | tacgcttctt | 60 |
| tgcattatgg | atgtgcaaaa | acatccggtc | ggatcgaacc | atattgcaac | tgactcgact | 120 |
| cgaaccagtt | gcgaaaaaaa | acttgcccca | ttttatactc | agtttggttc | gacccgaccc | 180 |
| gctttggcaa | aaaaaattag | tgacctgaac | ttgaactgca | ttgctcactc | tcatcatcct | 240 |
| acgatctttt | tttctgtgca | acttcacttg | tttacgaagg | gaattgtggt | ttcgaagttt | 300 |
| gtacgactaa | gcgattatgg | cggatctgaa | tgaaacgctg | agatacaatg | tctttctcgg | 360 |
| aaccttactc | ggaatgt | | | | | 377 |
| <210> <211> <212> <213> | 1359 171 DNA Glycine mas | × | | | | |
| <400> | 1359 | , | | | | |
| atgaatacat | cggggcatga | tcatttatga | gagaaggagc | gaacttatcc | taccccactc | 60 |
| atatttttat | atatgatatg | aagttataca | ctctttttc | agagataact | catacactta | 120 |
| cactataaaa | aaaactgtat | cgcctaactt | ctccgctaac | ttatactctt | a | 171 |
| <210> <211> <212> <213> | 1360 454 DNA Glycine ma: | × | | | | |
| <400> | 1360 | | | | | |
| ttcgtaggcg | aatatcacat | aagttggata | atatgcggac | cattgtctat | gataagcata | 60 |
| aggaacctca | atgacattct | gcacattaac | atttcaagca | tattatttat | ttgacattaa | 120 |
| cataaataaa | caaatgttta | agggtgaaaa | tcgtgacctg | ctcatgatgg | aatgacgcct | 180 |
| caaatcggtg | cacaattctc | ggtacatgta | aatttgatgg | gccctagatg | agaaacgttt | 240 |
| atgtaatgag | taagtgaaca | aacatgtacc | cattgaaagg | agaagataaa | tatgtgcaat | 300 |

| atcgaacatg | tactatgaac | gaacagagca | aacatacaac | gatgaaggat | gcatgatgaa | 360 |
|----------------------------------|-----------------------------------|------------|------------|------------|------------|-------|
| gcatactcta | acatatactt | ataagaaggt | aaacataaag | gatggaaaag | ttcacttaca | 420 |
| acatcagacg | cattcgatga | tgatgattca | tagt | | | 454 |
| <210> <211> <212> <213> | 1361 331 DNA Glycine max | ς | | | | |
| <400> | 1361 | | | | | |
| agcttgtgct | tgttttattt | acattcctag | gatcatgagc | aactaggtgt | gtcctactat | 60 |
| gacttgagaa | acaaagatga | tcaaataaca | cgcaaagatt | taaaaggtac | taggttgcct | 120 |
| cctagcagcg | cttctttaac | gtcttgagct | ggacgcgtga | tgacttgtcg | gccacggacc | 180 |
| tactactttg | cttacctttg | gctttggact | tggtcggctg | ctggtcgacc | acgggtcgta | 240 |
| ggcaacgctg | cagcctttgt | agatgagctg | atggactctg | gaggtggcgg | cgatgcgtct | 300 |
| attgcccgct | gccggccata | cccaagctac | t | | | . 331 |
| <210> <211> <212> <213> | 1362 429 DNA Glycine max | x | | | | |
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| tctagccaaa | tggacttacc | ttgaattaat | tcctttgata | gcccttttga | gccttgtttc | 60 |
| cctttccttg | ttttgaagct | cactacaagc | cttatgtgaa | aaaccatgat | attaccatat | 120 |
| ccttaaggag | atttggagct | ttggaattgt | tttgggaata | agtgtggggg | gtttttgttt | 180 |
| cattggacaa | cttgttttgt | tgactatgct | tcatgatgta | ttttgggtca | tacttgatgt | 240 |
| acattgtata | ttggttaaat | gttggacatg | ctgaatgaaa | ttatgtttct | cacaggcgaa | 300 |
| ataaaataat | atgaattaat | aaggaaaatc | aaatgactaa | caagaataat | aaataagacc | 360 |
| agcaataagt | tgagtgaata | agatcttata | tggcacaaga | atgatgaaac | tcttgtttct | 420 |
| actcttcat | | | | | | 429 |
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| 010 | | |
|--|---|--|
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| <223> <400> | unsure at all n locations 1363 | |
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| cgccaataaa | ttcttgatca ctacctagaa atccttttgc aaagcatgct tccctaaatg | 120 |
| tattatacat | cacatcattg actattctaa tatctatgta agactgtgga ccttatgcag | 180 |
| aggaaaacat | cattctgagg taaaacaatt cgccagttga aggtgggacc catataagtc | 240 |
| tgcctattgt | atttccttgt tctcttggtt gccagcatct tttgtgtgca acataaacaa | 300 |
| atcttgacac | atattgagga taagtaagat cctgtccata agggtatact ttgttagaat | 360 |
| gcatctaggc | tgtgaacatt gattetttga etgtgggetn tgatagaact ggeaceaatt | 420 |
| gttgactatc | | 430 |
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| <223> <400> tgtatgtgaa gcaaaatatt atatggatat aagaatagta | tctcggctgt ttctagctcc ggactataaa aggctatgga gaaaagtgtt gaaaggaatt tgcagccatg tttttgtga agcttcaaat gataaactga attcttcgga gttattggtc agtgatcaca cttcatctac tttaaagggt | 120 180 |
| <223> <400> tgtatgtgaa gcaaaatatt atatggatat aagaatagta cccagagaaa | tctcggctgt ttctagctcc ggactataaa aggctatgga gaaaagtgtt gaaaggaatt tgcagccatg ttttttgtga agcttcaaat gataaactga attcttcgga gttattggtc agtgatcaca cttcatctac tttaaagggt tgtaaaatga actgatgaag ataatgatgc cagggaaccc aaattttggt | 120 180 240 |
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| agctataaga | cataaacaaa | ttgttattct | ataaaaaaga | attctaacaa | aacaaaaata | 60 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| atttttaaat | gtttgaacca | attgaaccaa | tttgacccaa | cccttntatg | attgattatg | 120 |
| gtcacaaatc | caccccaacc | taatttattg | aattttgatt | aagttgaatc | acagatttag | 180 |
| gtcaaatcgg | tccaactcga | cccaagaaca | cccttaacct | gtattctgtc | tccctccttc | 240 |
| tctgtgtgtg | tgaagtacct | gaaaaacact | agaaaaggaa | aaaaaaaaaa | gttgaatagc | 300 |
| ataatggata | aaacttagtc | tttcgaacac | cttgaatgct | ttttctaaac | aaatatcaat | 360 |
| ggacaatgga | gtttgtcc · | | | | | 378 |
| <210> <211> <212> <213> | 1366 489 DNA Glycine max | · · | | | | |
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| gagttntatt | cagaacatta | gagtttatct | cttttatctt | agtgagagcg | attctcctaa | 120 |
| attcttgagt | gattcaagaa | caccttggct | gtatcacagg | acttccacaa | cctttgtgtg | 180 |
| ttgacctctc | tggagagagt | gattctttcc | ttcctttcat | catcaccctt | gttctttcaa | 240 |
| accacaattc | cagaaaatcc | acctctgccc | agaattatct | cgtggccata | actcccattt | 300 |
| tacgcactca | aattaagtga | ttcttgagcc | taaattgaat | ttctaaacga | gacctttcac | 360 |
| ctcgatatgg | aatcatctca | tttggagccc | tgtagattca | gatattgcca | tttctatatt | 420 |
| tctgtccagc | caccacttaa | cctacgttct | accatcccat | tcatccatgt | tatgccaaga | 480 |
| accacctta | | | | | | 489 |
| <211> <212> | 1367 347 DNA Glycine max | ς. | | | | |
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| agcttgccga | ccaactcgcc | agttgagcat | gtttgcttac | tccagaacga | caagcttgtg | 60 |
| gacggcgcca | agtgggccag | attgctattt | gcaccgccat | ttttactaaa | ggcacccctt | 120 |

| tctatttttt | tgcaattcgt | tctccgtaac | gatacgaaac | tttaagaaat | tcgtaacgat | 180 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| acctattttg | cttccggacg | gccacgaatc | ctgatggagt | atatattta | ctgtttttta | 240 |
| ccttccgaag | aagccacggg | aactcacgga | ttgcgcagaa | tcacctcttt | tcgacttccg | 300 |
| ccacattacg | gaatttcacg | gatcgcacaa | gcctgctttc | ttttgat | | 347 |
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| ggccttgagt | ttctcacggt | ccacttggac | cccatttcta | ccaactacaa | aacctaagaa | 120 |
| aactatatta | tctacacaaa | aggtacactt | ctctatattt | gcatagaggg | tgtttttcct | 180 |
| aaggactgat | agaacttgtc | tgagatgtcc | taagtgaaaa | tctaggtctc | tactatacac | 240 |
| taaaatatca | tcttaatata | caactacaaa | tctacctatg | agaatcctta | tgacatgatg | 300 |
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| accactatat | ccatcttttg | gatgcattat | atagaaagcc | aaatggaatg | aagtgttccc | 120 |
| tataacattt | gtggaaagag | ttacataaaa | atttatgaat | ttccaaatga | caaccaacca | 180 |
| taatatagaa | ataaagttgt | atactaataa | ccaattcatt | tagtttattg | cctcatgcac | 240 |
| acacaaacct | gtctaaggtg | gtttgaagta | acaccttata | gagacttctt | ggcaatgaat | 300 |
| acaagaagat | cagtgacacg | ttagctgtag | aaccgaggac | aaagaaggta | ttagaaccaa | 360 |
| ctgaattaat | aataataaag | catctaaaaa | tcgtgtgatt | agatttttgg | ccaaattaac | 420 |
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| tgcttccttc | atcaattttt cataaggtca caaaatcacc caccactttg tctctaaatc | 120 |
| ttattagaaa | cttatattgt ttcattcatc agcttttcat aaaatcaaaa aattcctacc | 180 |
| actctttctc | tcaatcttat tgcaaaaagt aaattcacta ctataaaaat tggtttttct | 240 |
| agacatttaa | catcggttat gaaccaatgt tagaatgagt gccaataaaa gatgaccatt | 300 |
| gttaacattg | gttataaaaa tcaatgttga aatctactat ataagtatgg ttctcaccan | 360 |
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| taaagcacat | taatgcactg | ctatataaaa | cagccaactt | tcaagcaatg | aacttaaaat | 120 |
| aatagcaaat | tacaatctaa | gaccataatc | caaatttgca | ttgttacaaa | agcaagacaa | 180 |
| aagggagcaa | ctattttctt | gcataataca | attacaatgt | aattttcttt | ccaatcttct | 240 |
| aagctgataa | atttcctcat | aataccacta | cttanatatt | acagttggct | attacaatta | 300 |
| gcatcatatt | tcaatggtaa | gaagaaaagg | aattacaaat | acctcagaac | cttcttttat | 360 |
| gcattcatta | tactggcttg | gcttcaagta | acaggacatc | aagttcagag | agcatgccaa | 420 |
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| catcacaccc | tatcactgac | atctcaacgc | ccccatcatc | accttcttcc | gcttctcctt | 120 |
| cctctcttac | tcccttcttc | cccttctcca | aggaaaccac | catctccgcg | ccaccaccgc | 180 |
| cgaccgcgct | gtccaacccc | ttcttattct | ccttcttcct | cttctccctc | tcttcccctt | 240 |
| tgccttcttc | cctttctccc | ctttttcccc | ttggtcttag | ctgttgtaag | taattgttgc | 300 |
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| ttcttcatct | tcttcttctt | cttcttcttc | ctctattgtc | ttttttcaaa | cgacgcgcaa | 120 |
| caccctcttg | ctaattacct | tctaattatg | caatcgctct | attcgatttc | tagggctatt | 180 |

| gctattgcta | tgccttcgct | caccccttct | cacaaaaaca | aaatgctttc | tcttcccctt | 240 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
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| cat | | | | | | 303 |
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| cagttcctga | gaaactggtt | cccagaagac | aacttggagt | gaagattgct | gaanactcta | 120 |
| gccctgcaac | aagtcctaag | gaagtagaca | cggagatgga | caagaaaatc | cgcagtattg | 180 |
| tgagtagcat | tctgaaagat | gcttctgtgc | cagatgctga | gaaagatgtt | ccaacatctt | 240 |
| ccaccccgaa | tggttctgtg | cctgatgttg | agaaagatgt | tccaacatct | tccgctccaa | 300 |
| atgctgaagc | cgtcccttca | cccagtgaag | aggaatcaac | ggaagaagag | gatcaagccg | 360 |
| cagaggagac | ccctgcacca | cgggcaccag | aatctgctcc | aggtgacctc | atcgacctgg | 420 |
| aagaagtcga | atctgatgaa | gaacccattg | tcaacaggtt | ggcacctggc | attgcggaaa | 480 |
| gacttctaaa | cagagaggga | ntnaaccccc | ttaagaggtc | tggacgaat | | 529 |
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| tcctcccgca | gtaggccaga | aactaaagca | tatacctcaa | caatatttct | gcacagaaga | 120 |
| gttttcattg | aaataagtaa | ttatatatat | gactcatatt | atttgaactc | aagatagaga | 180 |
| acttacagct | ttttgtacct | ttagttttac | ccaattagca | ggaggcccaa | tatcaatcac | 240 |
| aattgtgtcc | aatctagcaa | gtcagcggat | aaactaaact | cccaaagtaa | acactttcta | 300 |
| gtttcaacca | aagcaacagg | ttggcaacac | atttcactaa | ttaactagac | aaagctgcaa | 360 |

| gcattaagta | agcacaacac | acaagagaaa | gcaacattga | anatgaagca | atgggatctt | 420 |
|------------|-------------|--------------|------------|--------------|------------|------|
| aactgtggtt | tagaatggtt | actgcatgca | gctttgactg | cattatccat | gtaagaagaa | 480 |
| gat | | | | | | 483 |
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| | | | | | . | 100 |
| aaaatgacat | tattcaaaat | tatgaacaac | gttägtttca | atgcatctat | tcacaacttt | 120 |
| ttccatacta | ttcaaacaac | catcagaaga | ggatccatat | acagtgaaat | catgcatata | 180 |
| cacctetate | caattttcta | aaaaatcact | tgaaatacta | atcatgcacc | actogaaggt | 240 |
| cacciciaty | Caatttttta | aaaaaccacc | cyaaacacca | · | accygaayge | 240 |
| accaggggca | ttgcacaggc | cgaaaggcat | tctcctatag | gcaaaagtgt | cgaacgggta | 300 |
| ngtgaatgtg | gacttttcct | gatcctcacg | agcaatagta | atttgcatat | aaccagaata | 360 |
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| gattetgata | cygaactaty | acactaagac | cggcncgggc | acageacece | accegacyce | 00 |
| cccaaggttt | tctgaccctc | gcgacatatc | tccaggtacc | actctgtggt | caacaaataa | 120 |
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| ccgtcatatt | tggtactagg | tggcgatcag | gcgatggcgc | anatcaacta | tcccatttcc | 240 |
| accagccagg | cataagcaca | ccatccccag | ttgcccacct | ttaaatttta | gctcacgtgc | 300 |
| | | | | | | 2.00 |
| acatacgtag | tcttctcctc | gttcctctca | gcaccgggtc | cctatcaacc | cctccaagct | 360 |
| | | | | at 200t 0202 | contrana | 420 |

| cagagtggag | gcagaaatct | tgcacaagaa | tcattcaaaa | ttcacagaag | ttttctaccc | 480 |
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| gggtctgtga | tctgtgctcc | tctgctgacc | accatacaga | cctttgccct | tccatgcagc | 120 |
| aacctggagc | aattgagcat | cccgaagctt | atgctgcaga | catttacagt | agacctcctc | 180 |
| agccttagca | gctaaatcaa | ccacaataga | acaattatga | cctctctatc | aacagataca | 240 |
| accctgaatg | gaggaatcac | cctaatctca | gatagtctag | ccctcaacaa | caacaacagc | 300 |
| agcttgctcc | ttactttcaa | aatgctgctg | gcccaagcag | accatacatt | tctccaccaa | 360 |
| tccaacaaca | gcaatagccc | cagatacagt | caacagttga | | | 400 |
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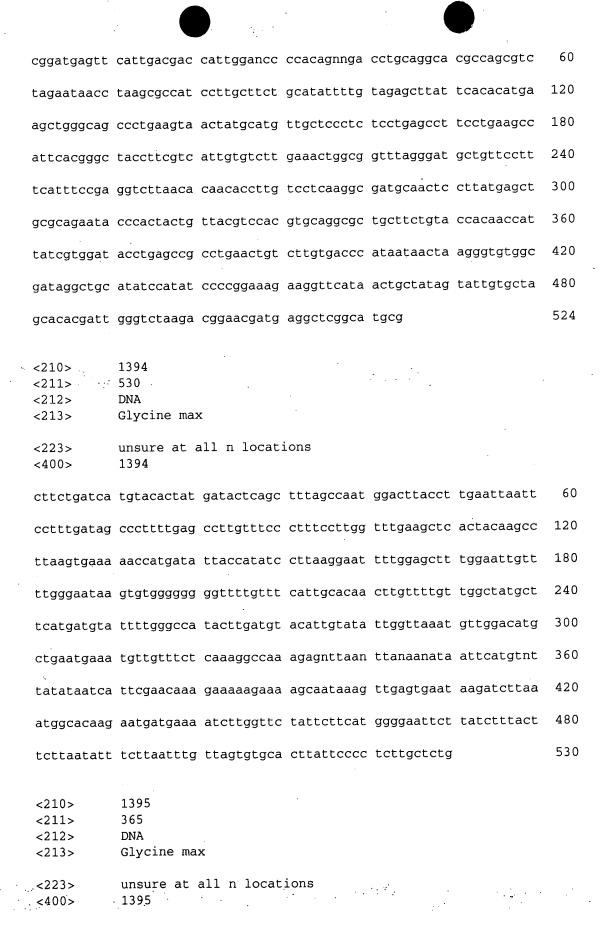
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| | ctttacggag | gaaatgacag tgaagtgcat aatcatgata ttagtatgt | t tgatatctca | 240 |
| | .gatataaaat | tatattgtga acataaatta tcgtgtgagg atcattctg | c aagaagtgag | 300 |
| | ctaaccccaa | agatggaaaa ttcttttttg gataatacag tgtcttttg | a tcataaccaa | 360 |
| | ttggctcaat | cttttccaca agttcggctt gactcttcag aggtacctt | c tgatcctatc | 420 |
| • | tcttataata | ctaatgtaga tgaaactcat catgaaaatt gttctcttg | a tectaceeet | 480 |
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| agagatgcat | tggagagatg | agctcaatca | ctaccattct | caccacaaca | catagattaa | 60 |
|----------------------------------|----------------------------------|-------------|------------|------------|------------|-----|
| gtaccgagtg | aacaactttt | aatttcgttt | tctctcactc | agtgatgctt | cttacatcct | 120 |
| tcgataggaa | tttttctttt | ttcaactcaa | ggcttcatca | tctctacaag | agctttccgg | 180 |
| aaactggtgt | attcatcaga | ggctggtcct | ttccctataa | tagtcgagtc | ttgacacctt | 240 |
| ttcacccttt | tttcatttgt | tctatatgtg | gacagggtcc | aaccattttt | ttccccttgt | 300 |
| gatatctgca | ccatctctca | tctggtgcct | taaccttacc | cttattcaaa | ggggaatgtn | 360 |
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| aacacgacaa | gtttatgcgc | gtccattctg | tctcccagca | caagatgatg | aaattgacac | 240 |
| ctttctcttc | ctaaatttca | aaacaatttg | actgtctcaa | ccacgcaacc | ttccttcacc | 300 |
| agctactata | ctaacttatc | atcctttgta | ctaactat | | | 338 |
| <210><211><212><213> | 1385 354 DNA Glycine ma | × |) · | | | |
| <223> <400> | unsure at 1385 | all n locat | ions | | | |
| aatgtacttt | cgngtcacca | atccacacac | aaacacacag | acaccggcat | tttccaacat | 60 |
| tcccaaagac | acagtcctag | gataagttaa | gaacaactcc | catctcttgc | actgtcttgg | 120 |
| ttccacatta | ttattattaa | tactactact | acttgcgtag | cgtgtgtgtt | ccacattgtt | 180 |
| gcttgttgcc | ctacccatga | tcttggaact | gagatgagaa | gccacatcga | ttaacaagag | 240 |
| caacattaga | tctcccaagt | tgaagtcttt | ggagacaccc | attatgatgg | ngggtgtgag | 300 |

| tctgagggaa | tcatggtgtt | tctgcaaagg | ggtcagcaag | tctgagagaa | tgaa | 354 |
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| <210> <211> <212> <213> | 1386 410 DNA Glycine max | : | | | | |
| <223> <400> | unsure at a | ill n locati | ions | | | |
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| gcacaacaag | ttttccacat | ccacaaatcg | cgcataaacc | caccatcccc | tgttgcccac | 120 |
| ctccaactga | gctcacgtac | tcccacgtaa | cccatatcct | cgtttctctc | aacaccgggt | 180 |
| ccccatcaat | cctcccaagc | ttccccaaca | tccaagtaat | tcaacattca | aacagcacaa | 240 |
| actatcacag | ccaagaaaac | agggcaaagg | cagaaaactc | tgcccaaaac | accaaccaaa | 300 |
| | ttcccactta | aagaccccag | taacatttcc | ttcgttccaa | ttcgttaacc | 360 |
| gttggatcga | actcgaaaat | ttactggaag | tctctagtac | ataagcctac | | 410 |
| <210> <211> <212> <213> | 1387 306 DNA Glycine max | ĸ | | | | |
| <400> | 1387 | | | | | |
| tggcttagag | agcgtccgtt | gagcgctaca | ctcgtgggct | atgcgcgagg | aagactctgg | 60 |
| aatataatga | gctgcacaag | ttgcctaagc | acacctattc | atctcactaa | gtgcaccgct | 120 |
| tcatatcatc | cgctgaccga | gaaaggcacg | ctctaaaccg | aaattcacta | atgcgcgcta | 180 |
| agcgatccat | aagtgcgcta | agcgcacgag | cacgaacaag | atcacctatt | taagcctgaa | 240 |
| attacatttt | agagggagag | tttggactgc | gattcagagc | tctgcatgtc | tacggtttct | 300 |
| agagag | | | | | | 306 |
| * ** | • | • | | | | |
| <210> | 1388 | | | | | |
| | 456 | | | | | |
| <212> | DNA | | | | | |
| | Glycine ma | x | | | | |
| • | unsure at | all n locat | ions | | | |
| • | • | • | | | | |

| agcttctgcc | acaacaaatc | caggaatcca · | catccaacct | acttggatca | attgcaaatc | 60 |
|-------------------------------|-----------------------------------|--------------|------------|------------|---|-----|
| aatacttgca | acctattgtc | atccaacaac | cctttgttca | agctgcacct | acctctatac | 120 |
| cagcaacctt | cgaacaagtt | gaacatgatc | aaccttaaca | tccacatcca | aaatcaccac | 180 |
| gaaatgaaga | tccacctcag | cagccataaa | tgataatgat | agtttatcat | tttccatctt | 240 |
| tcaaacctgt | atttgttgat | tacataagag | ggagaaattg | gaattttgat | gtatcatgag | 300 |
| cttagactta | tctttcatct | ttatatgctt | tgttggaata | tatatgttgt | aacatatgtt | 360 |
| atgttgcttt | | gtgggtggat | tattcaattt | cgcctcttaa | ctatgctntt | 420 |
| | | ctttgatctt | atatat | | | 456 |
| <210> <211> <212> <213> <400> | 1389 321 DNA Glycine ma: | ĸ | | : · | | |
| | | | | | + a = = = = = = = = = = = = = = = = = = | 60 |
| | | attcttcacg | | | | 60 |
| ctcggcttag | atttacttca | cggaaacaat | ttttccaagc | aaattctaaa | gagagaaaag | 120 |
| tgcctaaggg | gctgaaccct | tttcttcttc | acttcctccc | ctatttatag | caaaataggg | 180 |
| gagatgcttg | ccgcccagct | cgcccaggcg | agccaggttg | cttcctccag | aagcaacagc | 240 |
| cttctggagg | aatcttctgg | agggcccaat | ggggcctggt | tgctatatgc | acacccatta | 300 |
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| caaatagaga | aagggcatgc | tacatattgt | ttaaaaattc | tgaaagccca | gtaatactgc | 120 |
| atgagaacga | tgtacgtctt | gaaattctaa | gcaaagggat | atggctaaat | tcttcatgag | 180 |
| taacatctcg | cacgcaatgt | gatatttttc | tatttttcat | gtattatgcc | tgcactttta | 240 |
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| <210> <211> | 1391 399 | | | | | |
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| <212> | DNA | | | • | | |
| <213> | Glycine max | | | | | |
| \Z13> | orycric man | • | | | | |
| <223> | unsure at a | 11 n locati | ons | | | |
| <400> | 1391 | | | | | |
| /400> | 1371 | | | | | |
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| ccttatacat | ataaatcagc | cccacagtcc | aaagctcaca | aaaccatgct | catatgtcgt | 120 |
| | _ | | | | | |
| tgaggcattt | caccgagcac | ttggtgggca | catgtttagg | catgaatatc | aagataatgg | 180 |
| aaaaaatata | gcatgcccca | ttacttcaca | ctgcacccta | aacctaaaac | catcccttac | 240 |
| gggcaatgtg | geatgeecea | ttacttcaya | Ctycacccta | ggcccaaggc | cacccccac | 210 |
| aacccctcaa | ttcaacaaaa | acaarcaaca | attcaatgat | aaatccctca | cattttttag | 300 |
| aacccccaa | cccacaaaa | acaagcaaca | accountgue | aaassassa | | - |
| caaatacatq | caacttagag | caccanaata | catcaatgga | aagctagaga | geccaagaat | 360 |
| | | | | | 4 | |
| gaggtactta | cttgttggag | atngaataat | agcgcaaat | | | . 399 |
| 5 55 | | | | | | |
| | | | | | | |
| <210> | 1392 | | | | | |
| <211> | 367 | | | •• | | |
| <212> | DNA | | | | | |
| <213> | Glycine max | ζ | | | | |
| | | | | | | |
| <400> | 1392 | | | | • | |
| | | | | | | |
| agaagttcaa | gtccatatcc | atcaaagtct | gaaaagagta | tgatgaacta | taggatgtca | 60 |
| | | | | | | |
| atatggccac | cgatgaagcc | ttggaatgag | aaaccaagaa | ggcccgaaag | gaagaacacg | 120 |
| | | | | | | |
| accaaagcaa | | | | | | |
| | agttttgagg | ggctttatag | ggcagcaata | gtgagctcaa | | 180 |
| | | | | | gttccgaaga | |
| ggtgaaagga | agttttgagg atcatcacgg | | | | gttccgaaga | 180 240 |
| | atcatcacgg | gtcaaaggca | tgatcitgaa | ggacgagcta | gttccgaaga aaggcttgcc | 240 |
| | | gtcaaaggca | tgatcitgaa | ggacgagcta | gttccgaaga aaggcttgcc | |
| ttatgtcgaa | atcatcacgg aagaaatttg | gtcaaaggca | tgatcttgaa taagcgagac | ggacgagcta ttgagggaat | gttccgaaga aaggcttgcc atgtgggcca | 240 300 |
| ttatgtcgaa | atcatcacgg | gtcaaaggca | tgatcttgaa taagcgagac | ggacgagcta ttgagggaat | gttccgaaga aaggcttgcc atgtgggcca | 240 |
| ttatgtcgaa | atcatcacgg aagaaatttg | gtcaaaggca | tgatcttgaa taagcgagac | ggacgagcta ttgagggaat | gttccgaaga aaggcttgcc atgtgggcca | 240 300 360 |
| ttatgtcgaa | atcatcacgg aagaaatttg | gtcaaaggca | tgatcttgaa taagcgagac | ggacgagcta ttgagggaat | gttccgaaga aaggcttgcc atgtgggcca | 240 300 |
| ttatgtcgaa tcatcgataa | atcatcacgg aagaaatttg | gtcaaaggca | tgatcttgaa taagcgagac | ggacgagcta ttgagggaat | gttccgaaga aaggcttgcc atgtgggcca | 240 300 360 |
| ttatgtcgaa tcatcgataa atgagta | atcatcacgg aagaaatttg gagcaaagag | gtcaaaggca | tgatcttgaa taagcgagac | ggacgagcta ttgagggaat | gttccgaaga aaggcttgcc atgtgggcca | 240 300 360 |
| ttatgtcgaa tcatcgataa | atcatcacgg aagaaatttg gagcaaagag | gtcaaaggca | tgatcttgaa taagcgagac | ggacgagcta ttgagggaat | gttccgaaga aaggcttgcc atgtgggcca | 240 300 360 |
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| ttatgtcgaa tcatcgataa atgagta .210> .211> | atcatcacgg aagaaatttg gagcaaagag 1393 524 | gtcaaaggca tcccaacagc aagctaaatc | tgatcttgaa taagcgagac | ggacgagcta ttgagggaat | gttccgaaga aaggcttgcc atgtgggcca | 240 300 360 |
| ttatgtcgaa tcatcgataa atgagta <210> <211> <212> | atcatcacgg aagaaatttg gagcaaagag 1393 524 DNA Glycine ma: | gtcaaaggca tcccaacagc aagctaaatc | tgatcttgaa taagcgagac tagcggtgac | ggacgagcta ttgagggaat | gttccgaaga aaggcttgcc atgtgggcca | 240 300 360 |



| | tacttttgtc | ttgaaggcag | ttctataagc | ccataatgca | tcatccaact | ngcttgacca | 60 |
|---|----------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| | atccttttta | gtggaggcta | cagttttctc | caaaatcttc | tttggctccc | tgttagaaac | 120 |
| | tctagcttga | ccattcgttt | gcgggtgata | cgatgagact | actctgtgcg | tgacattgta | 180 |
| | atggctcacc | atcttctgaa | gttggttgtt | gcaaaaatga | gagccccgat | cactgattag | 240 |
| | gaccctcgac | accccaaagc | aagcaaaaat | attcttcttc | aagaacctca | ctatacgttc | 300 |
| | agcatcgctc | tttgggcagc | cactgcttca | acccactgga | gacataatca | cagcccaagg | 360 |
| | atatt | | | | | | 365 |
| | 4 | | | | | | |
| | <210><211><212><213> | 1396 438 DNA Glycine max | x | | | | |
| | | | | • | | | |
| • | | unsure at a | all n locat: | ions | | · • | |
| • | gctgcatgat | tacatctccc | ctttctcaag | canattcttc | ttgatatcat | caaaatcttc | 60 |
| | atgatttaca | aaacctagtc | aaattctaaa | aaaccctaac | tgacataagc | taaaaaaccc | 120 |
| | tagtcggcat | caacttaaaa | atagcactga | ccgatgttga | tcgaaaaaac | cctagctaac | 180 |
| | atcgactaaa | aatagcctgg | ctgatgtcgg | caaaaaaacc | ttagtcgacg | tcaaccgaaa | 240 |
| | atctgtagcc | gacattggct | aaaatatcct | agccaaggtt | gaccgaaaaa | tcactagcta | 300 |
| | atattgacta | aaaagtagct | ctaactaatg | tcggttgaaa | aagcctagtt | ggcatcagcc | 360 |
| | aaaaaaacca | tggatgtcgg | tcgaaaaaac | ctacctgaag | tcaagaaaaa | acaacctacc | 420 |
| | cggcattggc | caaaaaac | | | | | 438 |
| | | | | | | | |
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| | <211> | 58 | | | | | |
| | <212> | DNA | | | | | |
| | <213> | Glycine ma | x | | | | |
| | <223> | unsure at | all n locat | ions | | | |
| | <400> | ·1397 | | | | | |
| | agcttgcctg | tcgcacatcc | aaattccaaa | cattactaat | gcgcttttat | tntcacct | 58 |
| | <210> | 1398 | | | | • | |
| | | 261 | | , | | · . | |
| | <212> | DNA | • | : | | | |

| <213> | Glycine max | | | | | |
|---------------------------|-----------------------------------|------------------|------------|------------|------------|-----|
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| tcattagatg | ttgcatttca | gtatcacttc | ctctattgga | agaacgatat | gcacttcttg | 60 |
| cattgtaaat | ttgtttgatt | gtggtgcaac | tattggcatt | gtgctccttc | aatgttagca | 120 |
| ggatgtttct | tggtttcacc | atcaactgtg | tcatatcaac | aataatattc | ttcctatcct | 180 |
| tagtcaatcg | cccaatgtat | ggatgtccaa | ctaaggactt | gaccaattca | tgacttgtga | 240 |
| atcccataaa | ctaacttcac | С | | | | 261 |
| <210> <211> <212> <213> | 1399 207 DNA Glycine max | | | | | |
| <223> <400> | unsure at a | ill n focati | ions | | | |
| agcttcctga | tgngcctaga | tggacccagt | gctgaaggac | acccctctaa | gacaatggag | 60 |
| gatatacatg | gagaataaga | tgaagaacaa | ggaattaaag | agaattcacc | aaacaaaaag | 120 |
| atagaggaag | cataagaaca | tcacctagat | gaagatgctc | ttgataccac | atgatgtaag | 180 |
| ctccattgga | gcttgtaggc | ctaggat | | | | 207 |
| <210> <211> <212> <213> | 1400 430 DNA Glycine max | k all n locat | ions | | | |
| <223 <i>></i> <400> | 1400 | ii ii iocac | 10113 | | | |
| ccctgcgaga | gctntttcag | acttgaagct | cgtaatccct | caagtaacta | gggatgttgc | 60 |
| tccctctcct | gggccttcct | gaagccattc | tcgggcttcc | ttcttcattg | ggccttgaag | 120 |
| cttgcggttc | agggttgttg | ttcgtaacat | tcccgcggtc | ttcaaacaac | accttgtcct | 180 |
| caaggtgatg | cagctcctta | agacatgccc | agtcttccca | cgacgtttca | tccaggtgca | 240 |
| ggccctgcca | ctgcaccaga | accattttt | tggaccccta | gtccgtcgga | actgtcttct | 300 |
| gacccagaat | agctaatggt | gtggtgatag | gctgattatc | catagccccg | gaaggaaagg | 360 |
| tctcaactgc | tattggattg | ggcgagccca | cgaaaggttt | taggatggaa | caatgaaaca | 420 |

| cgggatgaat | | 430 | J |
|-------------------------|--|-----------|---|
| <210> <211> <212> <213> | 1401 520 DNA Glycine max | | |
| <223> <400> | unsure at all n locations 1401 | | |
| gatttgcaca | tcgaanacgg aaaannaact ngaccgccgg gacccaccgt ggncaa | agcta 60 |) |
| anncgcactt | attttcgtta cttgtgcacg acccacagaa ccgaatgcca ctctaa | agcct 120 |) |
| cccgtgctga | aacaagatat taccctctcc tcggcgacaa ctggaacctt gcaatg | ggccg 180 |) |
| agggagaaca | gagggacgcg ggctaacatc gacgaacaat aggctgggtg atgacg | ggcaa 240 |) |
| caaaaccata | gccgcgccta cgaaaatctg taggcgactt cggctaaagc atccta | atcca 300 |) |
| aggttgacct | gaaaacttct agctactata gactataaac gagctctaac taatgt | tegeg 360 |) |
| tgaacacgcc | tacgctggca tagcccaaaa aaccatggat gaccgtcgaa aataac | cctac 420 |) |
| ctgaagtcaa | gaaanacatc ctacctgcta tcgccatgat acaccctggt tgacat | tatgc 480 |) |
| aaaagaatct | cgctgaagaa acttgcacca gccgcaccct | 520 |) |
| <210> <211> <212> <213> | 1402 60 DNA Glycine max unsure at all n locations 1402 gcgcaggtta gggagacgaa gtgtaagtgg ncgcgatata cgaaga 1403 568 DNA Glycine max unsure at all n locations | atgat 60 | Э |
| <223> <400> | unsure at all n locations 1403 | | |
| aactcgccgt | gaaatgcaac aataattttc gaatttaatt atntnnntan nnnna | agaga 60 | 0 |
| gcggacgagg | cctggaaacc gaacannagc ncagcngnag aaaggngacc cacac | atggg 120 | 0 |
| actatagggt | ttcgggccac ggagcacaac aagaantcca catccacaac gcgcg | catac 180 | 0 |

| acccaacata | ccctggggcc | cacctccaac | tgagctcacg | tactcccacg | gagcccaaat | 240 |
|----------------|-------------|--------------|------------|------------|-------------|-------|
| tctcgatgac | ctcaacaccg | ggactccaca | aataccccca | agcatcccca | acatcaaagt | 300 |
| aatacaacat | tccaacaaca | caagctaaca | cagcccagca | aaacagggca | gaagcagaag | 360 |
| acactgccac | aacaccaagc | aaatcacagc | tgttctcacc | taaagaccgc | agaacaaacc | 420 |
| cttcggccac | acgaagagac | gcgctcacca | ctccggaaat | gccctccttt | gcgatttgga | 480 |
| gcggaatagg | caacacaagg | tcgaagcccg | tcgggcacca | aagttgagga | taacaaaaca | 540 |
| acacgccgcg | cgcacgcaag | gacacccg | | | | 568 |
| | | | | | • | |
| <210> <211> | 1404 520 | | | | | |
| <212> | DNA . | | | | | |
| <213> | Glycine max | K | | | | |
| <223> | unsure at a | all n locat: | ions | | | |
| <400> | 1404 | | | | | |
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| ctngataaca | aggctcttta | gtttagtatc | tttaanggca | tgctcctctt | ccattntgca | 120 |
| tcctgctaca | ggaaggtgcc | atttggtaca | gctaagaatt | ctttagaggg | ctgatggggt | 180 |
| ttatcaacaa | ggtagtccca | actaggattg | gacacttcca | ccgttggatg | ataggcatct | 240 |
| tctacaatat | cctttatttc | catgggatct | tcattctcct | tatattgcgc | atcctctntg | 3 0 0 |
| gtgttctgct | taaagagtca | gaagcattac | ccattttctc | ttataatgtg | tgaatctggn | 360 |
| gcattttatt | tttctagaaa | agaaaataca | attatcccca | tgagactcat | tagacatcca | 420 |
| ctccananaa | aaaatcgtta | gtcgttaatg | ttcactatct | ttgttgacaa | attctcgaat | 480 |
| aattcaacta | attatcacac | ataaggctga | cctgttatan | | | 520 |
| | | | | | | |
| <210> | 1405 | | | | | |
| <211> <212> | 497 DNA | | | • | • | |
| <213> | Glycine ma | x | | | | |
| <223> | ungura at | all n locat | ions | | | |
| <223> <400> | 1405 | uii ii iocac | | | | |
| aggttcttaa | ggaatgaaag | aaaggagagc | acttgatcta | ttttaagatc | tttnncttca | 60 |
| | ottaccaaaa | ctcatcaaaa | ataataatoo | aaaactaaca | ctaataagat | 120 |
| acaacaacac | cciaccaada | cccacyaaaa | acaucaacyc | | - Juniougue | |

| | | | | gaanaagget | taccatccaa | 180 |
|----------------|-------------------|-------------|------------|------------|------------|-----|
| gttgcacaaa | tacccattat | gggtaaactc | aaayaaayaa | gaanaaggct | Lactatteaa | |
| tagtggggtc | acaagctcaa | ggaaatagat | gagtgcaaat | tgtcctanag | ggaaataagc | 240 |
| cctattcttg | agagtgaatg | aaaaacctcc | ttatggttgg | aggagaaaat | gggaaagctc | 300 |
| tgagaaatga | gtaaaggtgc | atagttccaa | agtatggaga | atggtaggaa | aagaanatgg | 360 |
| ttntatctta | acaaacctcg | aggcccatac | tnctctagaa | ctnttactca | tcactaagct | 420 |
| taaccttttt | ctttaaggac | anagactacg | gtacacaact | aaactttgtg | tcatcgagga | 480 |
| aacaaaaata | tgttggt | · | | | | 497 |
| <210> | 1406 | | | | | |
| <211> <212> | 372 DNA | · | | | | |
| | Glycine max | X | | | | |
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| tgcctccctt | tccatcatac | ggggtaccac | ctgtgccgcc | agatctccta | caacttttgg | 120 |
| gcgtgctctt | tgaatgatcc | gaccccctct | ttacacatgt | tctcgcgacg | catcctatcc | 180 |
| gcaaccatat | caaacttgct | ctgactctcg | cctccaaaag | gcatccatta | tgtcctttca | 240 |
| aaatggactc | cgcaaggtca | acgttacgta | ccaggtaaca | cgtccccata | tgactctctg | 300 |
| gaggaagcat | cgcatctcta | tctttggcga | tcaccctctc | tgcaatcatc | tttaatggtc | 360 |
| ttggacagaa | ct | | | | | 372 |
| | | | | | | |
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| <211> <212> | 482 DNA | | | | | |
| <213> | Glycine ma | x | | | | |
| <223> <400> | unsure at 1407 | all n locat | ions | | | |
| ngcttgtctg | ttgtcgcatg | cataacggac | cttaaatact | agctggtacc | ggnntgtaaa | 60 |
| naagcggctc | ttatataatg | tngttgctta | cgacgaaaca | cgcgaagtgg | acctattata | 120 |
| tgaaattctt | atctttagga | gacatatcga | gttcatattt | gtttcgtata | ttgaagttac | 180 |
| agtcttgtgt | acagtggacc | tggaggagac | ggaccaatac | catgcagagc | ctatttttt | 240 |

| tatttttatc | aaagatctct | acctccatcc | attcaaattg | atgataaaga | gccttaacat | 300 |
|----------------------------------|-----------------------------------|-------------------|------------|------------|------------|-----|
| tgatgtaata | acaccaagtt | gaaatgtcgt | tgagctgcag | ttaacaggac | gatgaaacaa | 360 |
| gcaatatttc | ttttggccat | gcgtttactc | aatggtctag | aaagatgcaa | gttatattac | 420 |
| atcggttatc | actgaagtga | agatgcccct | ttacatcgct | aatacacgtc | ggtgaaacaa | 480 |
| tg | | | · | | | 482 |
| <210> <211> <212> <213> | 1408 386 DNA Glycine max | k all n locati | ions | | | |
| <400> | 1408 | | | | | |
| atctcttgac | cctaanagnt | gctngntgta | tgggggagtc | ttctgcttcc | taaaacataa | 60 |
| caaaccaccc | cttacctaca | atttatttaa | tcaatgtgtg | tggtcatggt | aaccaacaac | 120 |
| actctnggat | tctaagcaca | agactattcc | acttaattta | atataaggcc | caaatactcg | 180 |
| ccacaaacct | tccttgtgaa | gaagatccta | ccaaactaag | ctcatgtgga | aacacatggg | 240 |
| aagagtggcc | atatcaatac | ttcgcaccac | tctaaaagta | ttccaaagcc | gtgccaaaaa | 300 |
| aaagagcggg | ggcttcctcc | ccagaaagcc | ccagaggggt | acccctcat | ttccatggcg | 360 |
| gaactctccc | accaccccag | tttttc | | | | 386 |
| <210> <211> <212> <213> | 1409 534 DNA Glycine max | ς | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| nggagatgtc | atgttcgaca | gccattgcga | gnancgnnga | cacannnnac | tactccaggc | 60 |
| tggaggaata | tgggggaccc | atcacatgtg | tgcctngtgg | cttgttggcg | aaggngcaca | 120 |
| acaagntttt | cacattcacc | atgcgcgcat | taaaccatca | tcccctggtg | gccaacttca | 180 |
| actgagctca | cgtactccca | tggagcccat | atcctcggtt | ctcttaacaa | cgggtcttca | 240 |
| ttaattcctc | caaactttcc | caacattcaa | gtaataccac | cattcaacaa | cacaagctat | 300 |
| 020200000 | C2222C2CC | | atactotoso | C2222C2C2 | 2002221020 | 360 |

| atcttttctc | acttaaagac | cccaagtaca | aatccttcgt | ccacacgtag | agacgccttc | 420 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| acgagtccgg | aaattgccct | cttttgcgat | tgagccgaaa | tgggcacaca | agttgaactt | 480 |
| tttgggcaca | ttgttgagga | gaaaaaataa | aaggctcctg | aaaaaagaga | cttt | 534 |
| <210><211><212><213> | 1410 409 DNA Glycine max | ς. | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| tccttagagt | cacccgcggc | atgcaagctn | tgagggtgcg | tagtccacca | tcttttcata | 60 |
| gtagagtatc | gataatgtgt | ctaccatcac | gattatcgtc | tccctttcca | tcataggggg | 120 |
| taccacctgg | gccgccagat | ccctccacct | tttgggcgtg | ttctttgaaa | gatccgtccc | 180 |
| cctttttaca | catgttctgt | agttgcatcc | tatccggaac | catatcaaaa | ttgtactgat | 240 |
| actgcctaac | aaaaggcaac | cattaggtcc | ttccaagaat | ggactcggga | aggttccaag | 300 |
| ttagtgtacc | aggtaacagc | taccccagta | agactttctt | ggaaggaatg | tatcagcaat | 360 |
| tcctcatctt | tggcgtattc | acccatcttc | tgacaataca | tctttagat | | 409 |
| <210> <211> <212> <213> | 1411 435 DNA Glycine ma | × . | | | | |
| <223> <400> | unsure at 1411 | all n locat | ions | • | | |
| gctggtgagg | gtganaatct | cagctgggag | ctgcccagag | aagaaattgt | ggctcatgtt | 60 |
| gagactagtg | aggtttgtga | agatgatgaa | ttgcttccct | gaaaccacac | ctcccaattt | 120 |
| cttcatggaa | aggtctatgg | aagttacaat | tgttgagtca | ttgttacact | tgatgccgga | 180 |
| ccaagaacat | gcataggatt | tcccagttaa | ttttcctcca | gagggcacca | cccaattgtg | 240 |
| caagctgttg | tcatcatcta | caagctccga | ttttaggctg | agaagtgcct | ctgagtaagg | 300 |
| gtcaattgct | agaactgctg | atgataccat | gaagaaggta | acaagaataa | gatttttgat | 360 |
| gtagaaagca | ttgaaaatct | ccattggaac | ttggagagca | tcacaaggta | gagagggaca | 420 |
| atnatasats | cccta | | | | | 435 |

| <210> | 1412 | | | • | | |
|---------------|-------------|------------|------------|------------|------------|-----|
| <211> | 447 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine max | ζ | | | | |
| | | • | | | | |
| <400> | 1412 | | | | | |
| • | | | | | | |
| agctatggag | aaccaagcca | atcagaatgc | tatacgaaat | atagatggga | atagaggtaa | 60 |
| | | | | | | |
| caatggtggt | aatgacggac | cgaggcagaa | ccgggttgag | ggagtaaagc | tcaatgttcc | 120 |
| | | | | | | 400 |
| tcccttcaaa | ggtagaagtg | atccagatgc | ctacctggac | tgggaaatga | agactgagca | 180 |
| | taasstasat | agastgatga | ganganagta | aaggtaggaa | gaggtgaatt | 240 |
| egtattigee | tgcaatgact | acactgatge | gcagaaagcc | aagctagcaa | cagcigaacc | 240 |
| ctccgactat | accettattt | aataacataa | ataccaaaga | gaaatgttga | gagaggaaag | 300 |
| cccgaccac | geeeeegeee | ggeggeacaa | acaccaaaga | gaaacgccg. | 9494994449 | |
| gcgagaggta | gatacatgga | ctgagatgaa | aagggtgatg | agacaaaggt | atgtgcccac | 360 |
| 9+9999 | 3 | 3 3 3 | 333 3 3 | | - | |
| tagctataac | agaaccatgc | gacagaaact | ccaagggctg | tcccaagggg | aattaaccgt | 420 |
| | | | | | | |
| ggaagatatt | ataaagagat | ggaaatg | | | | 447 |
| | | | | | | |
| | • | | | | | |
| <210> | 1413 | | | | | |
| <211> | 431 | | | | | |
| <212> | DNA | | | • | | |
| <213> | Glycine max | x | | | | |
| · <400> | 1413 | | | | | |
| ~400 > | 1417 | | | | | |
| gagacaactt | actcgagaag | ctagagetta | gctacacaca | cccctctaat | aactaagctc | 60 |
| gagacaacc | | **** | | | | |
| acctccttga | gaagcttcct | tgagaagatt | cctaaagaag | ctagagctta | gctacacata | 120 |
| | | | | | | |
| cctctctaat | agctaagctt | acctccttga | gatgagaagc | tagagcttag | ctacacaccc | 180 |
| | | • | | | | |
| cctataatag | ctaagctcac | cccatgacag | aaaacatgag | aatacataaa | aaaaagtcct | 240 |
| | | | | | | |
| tactacaaag | actacttaat | agaatggcca | aaatacaagg | cccagacgaa | agaataacct | 300 |
| | | | | | | 260 |
| attctaatat | ttacaaagat | aatcgggctc | atacttagcc | catgggcttg | aaatctaccc | 360 |
| | | | | 2000000000 | agttggagtg | 420 |
| taaggctcat | gagaaccccc | gggcettece | Liggaletet | agcccaatct | actiggagic | 420 |
| ttctacccaa | + | | | | • | 431 |
| LLCLacccaa | | | | | | 4J1 |
| | | | | | | |
| <210> | 1414 | | | | | |
| <211> | 488 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine ma | x | | , | | |
| | | | | | | |

| | · | |
|----------------|--|------------|
| <223> <400> | unsure at all n locations 1414 | |
| ccgcttctga | tgatgaatca agttgattca agtagttntg atgatgataa aaagcccaag | 60 |
| agtttgattt | caagattgag tcaacaagtt caagatcaag attaaatcaa gattaatttc | 120 |
| aagtttcatg | agaagaaatc aagaagattc aagattcaag agaagtttga tctcaagatt | 180 |
| caagagaaga | tgaattcaag attcaagaga agaaatcaag aagacttcac aagggaagta | 240 |
| ttgaaaagat | ttttcaaaaa acaaacatag cacagttttg tttttcaaaa aagtttttct | 300 |
| caaaattttc | taagttccag agtttttact ctctagtaat cgattaccaa ttacctgtaa | 360 |
| ttgattacca | gtggcaaagt ttgatttcaa aagcttttaa ttgaatttgc aacgttccaa | 420 |
| ttgttnttta | aatggtgtaa tcgattacaa tatattggta atcgattacc agtgtatctg | 480 |
| aacgttga | | 488 |
| | | |
| <210> | 1415 | |
| <211> | 476 | |
| <212> | DNA | |
| <213> | Glycine max | |
| <223> | unsure at all n locations | |
| <400> | 1415 | |
| | | C 0 |
| | aaaattcaat acaaggccct ctcaaggatt tattcaaaac atatgcaagt | 60 |
| tgattgtttg | aactaacaaa ctcggtagaa atctaattgg acagtagctt tccctcataa | 120 |
| aatgacaato | aatttttatg tgcttagttt tatcatgaaa cacttgatta gaagcaatat | 180 |
| gaaagtttgt | ctggttatca caatacaatt tcattggcta aatttcatag aattgtagtt | 240 |
| cttgaaggag | atgtttgatc cacaccgact cacatgtggt tgtggccatg gtcctatatt | 300 |
| cggcttttgc | actacattga gcaacattaa actgtttctt actcttccta gagataagat | 360 |
| ttccaccaat | ggagacacta tettgtgtta aagagtetat etataggaga aeetgtgeaa | 420 |
| tcaaaatcac | aatacccaaa gaattgcgca tctcatttat cttcatgata taacta | 476 |
| | | |
| <210> | 1416 | |
| <211> | 313 | |
| <212> | DNA | |
| <213> | Glycine max | |
| | | |

| agccccatca | ctacattctc | ttgtagcaag | atatttgttt | ttatcagctc | catgggcaag | 60 |
|----------------------------------|-----------------------------------|--------------|------------|-------------|------------|------|
| gacatggcct | acatagacct | tcttgacact | cttgagagat | gcaacgatta | tactccctcc | 120 |
| atatcgcgat | ataagactta | attgtctaat | ccattaagat | aaaggaaagt | gatcaaccca | 180 |
| gccgataaca | ataaatttgc | gtcacattca | tcacttcttt | cacaactatc | cccgtagcta | 240 |
| atacttctat | ttcttttaat | ggcttatcaa | catattacct | ctctttttt | aatgaggaac | 300 |
| atttctagtc | taa | 57 5 | | | · | 313 |
| <210> <211> <212> <213> | 1417 406 DNA Glycine max | K | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| | | | | | · . | . 60 |
| ttgatactat | tattataaca | atgaacactt | atgaatattt | gtgattagat. | gtaatgtata | 60 |
| aactctgata | ctatttatac | aaatattatt | tttcttaatc | cactttttta | taaaaaaaac | 120 |
| agttatgtat | aaaatacttt | gcgtagaaaa | caatcttgaa | tatctaatgg | tcattcgtat | 180 |
| aaaataatat | atgagtaaga | tgatattttc | taataaacat | ttgaatntaa | ttaaaataca | 240 |
| ttaataatat | aaaaaaatta | tattatcatt | caattacaaa | aatattatgt | ataataaatc | 300 |
| tggtgactct | aataataatt | atctctaaat | tattttaaaa | atgattcttt | attggatgat | 360 |
| aatgtaaaga | tcttttaaca | ctaattgtat | atgacaaata | gatatg | | 406 |
| <210> <211> <212> <213> | 1418 398 DNA Glycine ma | x | | | | |
| <400> | 1418 | | | | | • |
| agctctctta | agacgaatcc | tatttatgct | agagcttagc | tacacatacc | tctttaatag | 60 |
| ctaagctcac | ctcctttaga | tgagaagcta | gagcttagct | acacaccccc | tataatatct | 120 |
| aagctgaccc | ccatgacaga | taacatgata | ataaaacaca | agtccttatt | acaaagacaa | 180 |
| ctcaggatgc | cccgaaatac | agggctgata | ccctatacta | ctagaatggc | caaaatacca | 240 |
| tgccttgacg | aacgaaaaac | ctattctaat | atttacaaag | ataagcgggc | tcatacttag | 300 |
| cccatgggct | cgaaagctac | cctaaggctc | atgagaaccc | tagggccttt | ccatggatct | 360 |

| ctaccccaat | ctacttggag | tcttttaacc | aatgccct | | | 398 |
|----------------------------------|-----------------------------------|-------------------|------------|------------|------------|------|
| <210> <211> <212> <213> | 1419 416 DNA Glycine max | ζ | | • | | |
| <400> | 1419 | | | | | |
| tgaagaactt | ttcaagaaag | tcataccacg | aacttgaatt | ccactcactt | aaagttctat | . 60 |
| tacagctagg | ctatgttaca | agagctactc | tttttcctac | cttgactttt | tatccatata | 120 |
| aaaatatgaa | ggttcttgcc | gagaaagttt | taatgagacc | tcatcctaca | aatattatca | 180 |
| atgaagaaat | atttcaacaa | tcacacttat | gtcattatat | tactcctttt | ttaatattgt | 240 |
| tccccctaga | ataccctctt | tggctaaggt | taaacttcat | taatcataca | ttagtagtcc | 300 |
| ctcctgaata | ccctgttgaa | ctaaggttta | acttccttaa | tcataaataa | tagctccttg | 360 |
| ctataaactc | tcttcggcta | aggctaagct | catataatca | taataacagt | tgaatt | 416 |
| <210> <211> <212> <213> | 1420 448 DNA Glycine max | k all n locat: | ions | | | |
| <400> | 1420 | | | · | | |
| agctngacga | tgttganaag | aaaatatgtt | gtcataattg | aagaatgaac | atgtagcttc | 60 |
| taatgactct | gaaatgtcct | acattaatat | ataattgtta | tgctacaaat | tcacataatt | 120 |
| cttagtatgt | tacgttaaat | ttaattggca | aacgtgtata | acttatggat | atactattat | 180 |
| gtcattaata | cgaataccta | gtacatttaa | cggttaccta | atttaaaata | atttgttaac | 240 |
| attaacccta | atatttagag | gaataaacag | agaataaaaa | ttataatcca | aaataactta | 300 |
| tcatttacaa | aatgtgtggg | aaaaccaata | tgtttgcaaa | tacatgaaaa | ttatatacat | 360 |
| actcgacata | tgaaaatata | acatggatga | tgtctatggc | tgatccgtgc | gctgccttct | 420 |
| tcgcgacttg | acataaacat | tgccatct | | | | 448 |
| <210> | 1421 | | | | | |

| <213> | Glycine max | |
|-------------------------|---|-------|
| <223> <400> | unsure at all n locations 1421 | |
| tctcccgcaa | ttttctataa atagggggag atgtgaagta tatgagggtt cagcccctta | 60 |
| tgcacttctc | tctctttcga aatagttgag gaaaattagt tccgtgaaga acatccaagc | 120 |
| cgaggcgctt | ccgtaacatt tacgtaacgt ttccgtgagt aattacgcga agattctcga | 180 |
| ccgttcttca | agattcaccg tttgttcttc gttttcttca gtcttcaacg ggtaagtacc | 240 |
| tcgaaccaag | cttttcgatt cattctatgt acccgtggtg ggccacattt cgtttcatgt | 300 |
| atatttattc | tcgtctccat ttacttttta ttcccccttt tgacgtgctt angccattta | 360 |
| tttaagtcgt | ttctcgctta atctgnaaat aaaataaatt tccaccgatc gttcgaa | 417 |
| <210> <211> <212> <213> | 1422 405 DNA Glycine max unsure at all n locations | |
| <400> | 1422 | |
| agctnttnta | agcattttta atacttacta gcagaatttt caaaccgcan aaactgaatc | 60 |
| gaaccaacct | acaaaatatt ggtttggatt tcataaataa tttaaagtgc accaaaccgt | 120 |
| actgcaaaca | .cccctagatc.gtagtattgg tagatagcta atgctttctg catgctgggc | . 180 |
| tctctgaaat | tcttcgagct aactgaattt gctaaaaaca ttgttggata gttgccttaa | 240 |
| ttgcagttgt | ccctagcctg cctttagtgc agtctctttg ggttgcctaa tttcagtctc | 300 |
| acatcaattg | aagatatagt caatataatc cttataaaag gcttcaacaa tcttgacctt | 360 |
| acaagccaat | tgggttgggt caagttaacc ctaagcccaa attct | 405 |
| <210> <211> <212> <213> | 1423 450 DNA Glycine max | |
| <223> <400> | unsure at all n locations 1423 | |
| cgtttttctt | aattntatga gtttctattt ctattcaatt atgtaaatat catttaaatg | 60 |
| ttatcttctg | ttgatcgtgg atattggctt tgttctgctc aagttcattc atttgcagca | 120 |

| tgtgctgatt | tattatgttc | atgagatttc | ggtgtgtatc | aatttgccat | ccgtgcagca | 180 |
|----------------------------------|-----------------------------------|--------------|------------|------------|---------------|-----|
| aattagaatg | gttaataagt | ctagatgaat | atgatttttc | ttcaatgcga | tcttcagtat | 240 |
| tattagtttc | tgaatttgat | catgaggcat | atggattgag | ttttaaacct | ttcttcttgc | 300 |
| aatgtagagt | agttatgtgt | tgcgttctgc | atagcatcca | atctccgcat | gatttggtga | 360 |
| tgtctagccc | agatcanact | ctcanattng | tcttcaactt | cacaattttc | ttaggtctac | 420 |
| tatgggtgtt | tcttgactta | cttcctctat | | | | 450 |
| <210> <211> <212> <213> | 1424 374 DNA Glycine max | ζ | | | | |
| | | | | ttaastasta | ant the tanks | 60 |
| | | | | ttccatcatg | | |
| tgtatagagc | caatcccact | agtcttacaa | gagggattgc | ttcccatcat | aacattacct | 120 |
| acggatttct | tatcataggt | caccaaccag | ctcctatgtg | gacacatatg | ataagaacaa | 180 |
| tctaattcaa | gaaccccaat | tcaaaatgac | gtcgttattg | atcaacaaca | gagaacacca | 240 |
| aatcagtttt | tgatgaggaa | tcattctgaa | cagaggttgc | aatagatttt | tttttccttc | 300 |
| ttttctttgg | acaatatttt | ttctagagac | ctggttcctt | gctataatta | caaatatccg | 360 |
| tttgtttaac | tttt | • • • | | | • | 374 |
| <210> <211> <212> <213> | 1425 441 DNA Glycine max | × | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| ttacggacct | atgaaactca | gctatgctgc | nacattacaa | tagacctcct | caacctcagc | 60 |
| agcaaaatca | accacagcag | aacaattatg | acctctccag | caacagatac | aaccctggat | 120 |
| ggaggaatca | ccctaatctt | agatggtcta | gccctcaaca | acaacaacag | cagcctgctc | 180 |
| cttccttcca | aaatgctgct | ggcccaagca | gaccatacat | tcctccacca | atccaacaac | 240 |
| aacaacagcc | ccagaaacag | ccaacagttg | aggeteetee | acaaccttcc | ctctaagaac | 300 |

| | | | | | gaataaatta | 360 |
|------------|--------------|-------------|------------|------------|------------|-----|
| tcgtgaggca | aatgacgatg | cagaacatgc | agtttcaaca | agagaccaga | geetecatte | 360 |
| atagcttaac | caatcagatg | ggacaattag | ctacacaatt | gaatcaacaa | cagtcccaga | 420 |
| attctgacat | gctaccttct | С | | | | 441 |
| | | , | | | | |
| <210> | 1426 | | | | | |
| <211> | 374 | | | | | |
| <212> | DNA | _ | | | • | |
| <213> | Glycine max | ζ | | | | |
| <400> | 1426 | | | | | |
| agcttgtgct | cgaggccttg | acctcataat | tgtctcatca | ctgtgtttga | tccattctga | 60 |
| gagtttccag | ggcttctgcc | acttccattt | aaactgtagc | agccattgat | gatgacttct | 120 |
| cttccacttc | caaagttttc | cggcttgtcc | tatagctgct | agcctcttcg | ttgacaactc | 180 |
| tagaatagat | atcatctgga | tataaaccca | ttaaaactta | ttgagaaata | aacactatca | 240 |
| tccaatgggt | | cacadaceed | ccaaaaccca | cegagaaaaa | | |
| tcatcatcat | cagggaaata | gaátctagca | aacatacctt | tcgtgcttca | tctaaaaatg | 300 |
| tagctgactc | cctgcctgac | caattaacaa | ctccaggagt | gaatttgagt | tgctctggtg | 360 |
| caggaagcga | catt | | | | | 374 |
| | | | | | | |
| <210> | 1427 | | | | | |
| <211> | 473 | | | | | |
| <212> | DNA | | | | | |
| <213> | .Glycine ma: | x . | | 4 | •• | |
| <223> | ungure at | all n locat | ions | | | |
| <400> | 1427 | arr n rocac | 10115 | • | | |
| | | | | • | • | |
| ntgaagaaac | anaaatgaaa | gctctaagga | accgaatgca | tgcacaaatt | aaaattataa | 60 |
| aaacaaaaaa | aagaagtaag | aaacaatgaa | cactcaccta | gaatggatga | acgcaagaag | 120 |
| | | | | | | 100 |
| ctttgatgaa | ggaggaagag | gagatcgaca | ttaagagact | aggaggttaa | gaggagacgt | 180 |
| aatagagagg | aatgaaaagt | gatgaatgag | aagagattgg | aaactgatag | gcttagggtt | 240 |
| | ~~~~~~~~~ | gagaagagat | ataataaaaa | attaaataaa | tatqaaataa | 300 |
| idalligiga | yayayayact | cacaayayyt | acaacyayay | accyaycydd | tatgaaataa | 500 |
| aaaagttagg | gttgcacttc | cttttatata | tagataaggt | taaatatgta | atatacttac | 360 |
| attgcattag | taattaaata | aaattagtat | aagaataata | cactatggta | actaaataat | 420 |
| aataataata | tatgatatat | gatataatat | aacacaataa | tagtaataat | aat | 473 |

| <210> <211> <212> <213> | 1428 448 DNA Glycine max | |
|----------------------------------|--|-----|
| <223> <400> | unsure at all n locations 1428 | |
| agctagtang | attatggtgt acccgtcata tgtggtacta ggtggcgatc gggagatggt | 60 |
| gcaaatcaac | tctcccacat ccacaaatca cacatgaacc caccatcccc agttgcccac | 120 |
| cttcaactga | gctcgcgtac ccccacgtag cccttatcct cgttcctctc agcaccaggt | 180 |
| ccccatcaac | ccctccaage ttccacaata tccaaacate atgaactace ctaaaccaag | 240 |
| aaaacagggc | agaggcaaaa aaactctatc caaaacacat tccaatacca cagctttccc | 300 |
| tgctcaaata | ccccagtaac attctctttg ttcttattcg ctaaccgttg gatcgactcg | 360 |
| caaattttac | tggaggtccc tagtacataa gtctacattg tgacgcgtgg gatctgctat | 420 |
| aaaatgtcca | gaacccaata tgtactac | 448 |
| <210> <211> <212> <213> | 1429 419 DNA Glycine max | |
| <223> <400> | unsure at all n locations 1429 | |
| tcttgcgtag | ccgctcttgg agctcagaan atcccaaaaa caaatccctc ttattactag | 60 |
| ctatnttgaa | ttctttagtt cctgaatgta caaccttcaa attgttgctc attcccctct | 120 |
| ttgttttctg | caaaaaagaa aatcaatatc aaagaaaaca tggatgaagc cctaaggatg | 180 |
| ccatgtacat | gtgtatttct gaagatatag tatttatatt ccatcaagca tacattgact | 240 |
| gctgattaca | tgtaatagac tttntataac atggttgccc canatcacaa ttaanaagca | 300 |
| caactaccaa | tettteagag teetttggtt aatttgtett gteteettet gtggtggggt | 360 |
| ttaattaata | atattataca ttttgccttc aaaaaacact tatgactaat cctttttc | 419 |
| <210> <211> <212> <213> | 1430 467 DNA Glycine max | |
| <223> | unsure at all n locations | |

| <400> | 1430 | | | | | |
|---|-----------------------------------|-------------------|------------|------------|------------|-----|
| ttctttttgt | gnacaacaca | ccttcatgtg | tggtgcgtga | gcagagagag | aaataattta | 60 |
| tgcttttcnc | tccctcactc | ctttcaatac | tatccaactg | taatcgcctc | tactatgcta | 120 |
| catgtaccca | cttgtatatc | cagatagtat | gcctcctatc | aactttgcaa | cttgagctag | 180 |
| agtatctacc | ataataccca | ctaactaaac | ggcacccatg | taagagcacc | tccatataat | 240 |
| agaaccgtgt | atgaaacgac | cagtgcctga | actgagagat | atatcttatc | tatctcatga | 300 |
| tcctctatca | cgatactcga | actccccaag | gatataacat | ccgataaact | tatttctgac | 360 |
| tcccaatana | tatccatatg | ttcgtagcct | ctcttaaata | aagcctctct | ttgacgttca | 420 |
| ccgcttattg | caacaagaat | ttcaattctg | acctcaatcc | actaacg | | 467 |
| <210> <211> <212> <213> <223> | | k all n locati | Lons | | | |
| <400> | 1431 | gaatagtttt | cttaacacat | attcaaattc | atcatataat | 60 |
| | | | | aatgttttc | | 120 |
| • | _ | | | aaagtagatg | | 180 |
| | | | | acaccctact | • | 240 |
| | | | | attttccttc | | 300 |
| | _ | | | aaaataaatt | | 360 |
| | | | | tatcccgata | | 420 |
| tcatctcacc | | cengaaccca | cccagacce | caccecgaca | acngegadaa | 438 |
| ceaccidace | | | | | | 130 |
| <210> <211> <212> <213> | 1432 408 DNA Glycine max | ĸ | | | | |
| <400> | 1432 | | | | | |
| agcccatgtg | tcgttcctgt | catattggtg | ccaaagaatg | atggaagctg | gaggatgtgc | 60 |
| tcacattgca | gagctttcaa | caacatcacc | attaagtaca | ggcatctcat | tcccaagcta | 120 |

| gatgatcttc | ttgatgaatt | gtatggatca | tgttacttct | ctaagataga | tttgaaaagt | 180 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|------|
| ggatataatc | agattacgat | tagagaaggt | gatgaatgga | aaacaacttt | tataaccaag | 240 |
| tatggcttat | atgagtggaa | ggtaatgcca | tttggtttaa | caaatgacct | tagtactttc | 300 |
| atgaggttaa | tgaatcatgt | tttgagagag | ttcttacgac | aatatgtggt | tgtctacttt | 360 |
| gatgacattc | ttgtgtatac | cacaaatgtg. | gatgagcatt | tgcaacat | | 408 |
| <210> <211> <212> <213> | 1433 444 DNA Glycine max | κ | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| agcttgtagg | attatggngt | acccatcacc | tgtggtacta | tgtggcggtc | gggcgatggt | 60 |
| gcacaacaag | ttttccacat | ccacaaacaa | cattcaaaca | gcacaagcta | tcacagccaa | 120 |
| gcaaaacagg | gcaaaggcag | aaaactctgc | tcaaacacca | accaaaatca | tatctttttc | 180 |
| tcacttaaag | accccagtaa | caattccttc | gatccaattc | gttaaccgtt | ggatcgactc | 240 |
| caaaatttta | ctggaagtct | atagtacata | agcctacatt | ttgaccgttg | ggatctacta | 300 |
| gaaaacatcc | agaactcatt | ctgcactaga | ctttccacag | gcaaccacac | acaagcaatt | .360 |
| ntctgcacaa | agccaaaatc | ctgctgcacc | tattntgaca | gcaaaattct | gcataagtgc | 420 |
| agatttcgaa | aatcacactt | cccc | | | | 444 |
| <210> | 1434 | | | | | |
| <211> | 466 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine ma | x | | | | |
| <223> <400> | unsure at a | all n locat | ions | | | |
| ggcttgccgc | acatccaata | ccaaacacca | cacttaatac | gaaccataac | accaaccagg | 60 |
| gaaggaattn | tccagaaaat | aagcctgtaa | aattcacctc | gatttcggtg | ttgtatgcta | 120 |
| acttactccc | atatctattc | aataatacaa | tggtagccat | aatcccagca | aagattcctc | 180 |
| aacctccatt | ttcctgagga | tacaactcga | atgcaacatg | tgcttatcat | aaaggagtta | 240 |
| tggggcattc | tattgagcat | tgtatgaccc | tgaaatataa | ggtgcaaagt | ctaattgata | 300 |

| tggtctaact | aaaattcaag | gagggcaatc | acttgtgaat | tctgacgttg | tcaagcgaca | 360 |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| ctattcatgg | ngcaatttga | aggttgttgt. | tagatgtctc | caatgactca | ttangatttc | 420 |
| caggtttatg | ccattactgt | aaataacagt | cacaatgcta | ataata | | 466 |
| <210> <211> <212> <213> | 1435 448 DNA Glycine max | ς | | | | |
| <223> <400> | unsure at a | all n locati | ons | | | |
| agctntagaa | acctacacgg | cgatccaacg | ggactagcac | aaagaaatat | aaatcgtttg | 60 |
| atttgatgtt | atcaacaact | cagaataatt | ttttttggca | atcctcgtct | tttcgaacta | 120 |
| gccaatggaa | tgtcattata | ggtacatgac | ccacttttta | ttcgatgtat | gttctttcaa | 180 |
| tttgaaattg | ggttgagatc | tagagaaaac | caacaactaa | actcacccat | gtaatgtact | 240 |
| ccatttattt | aatgtgttta | aattatcagt | tcttaatttg | agatatagta | ttctatttaa | 300 |
| tgattttcta | aaagtatatt | gtatttttca | attaaataaa | aagctataaa | tttatttttg | 360 |
| attcctaata | aatatctaat | tnttgtgttt | gctctttaat | aaacttttct | ttttcgntga | 420 |
| gtccttaatt | aaacaaaaat | tttaattt | | | | 448 |
| <210> <211> <212> <213> | 1436 484 DNA Glycine max | x | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| tatgagcatg | aaacctttct | ccaccaaccg | agaaagtaac | atcaaatgat | tcctcatcct | 60 |
| ctaacaacat | cccaaaatgt | tcaccaatat | cagattcagg | aacctgtatt | gtgtttaact | 120 |
| gagaagaata | tatctatgga | cgacactaaa | accgcaatag | tgcaatttat | cttcaagcag | 180 |
| tcatccttga | gaaaatttga | cgtctcaagg | tgtctccgtt | tgaaaaaccg | cgtatagccc | 240 |
| ctattacaca | acaagtgcat | cattgatcac | tacgtaatgt | acaccacaaa | aaatggatac | 300 |
| aagagctaat | aaatcatgat | gatatccaaa | tcatatcacc | aaaatcacaa | ggttctctag | 360 |
| ** | aatttaattn | ttatgtctta | tattctaata | aaagagctat | ctctttaacc | 420 |

| cctgacaata | gtgaaaaaag | aataaaagaa | aaatcaataa | cactttgctn | tattntaaag | 480 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| acta | | | | ı | | 484 |
| <210> <211> <212> <213> | 1437 417 DNA Glycine max | x . | | | , | |
| <223> · <400> | unsure at a | all n locat: | ions | | | |
| ctcttgagtg | agcatttaaa | gtctgcatat | canagcacag | tacataagca | aggtcttcat | 60 |
| tttgaataaa | taacattgtt | agtttaccag | ggagaaaaat | caacaaaaca | aagatgtagg | 120 |
| aacagagaag | cttcctaaac | accctaaggc | caatcccagc | ctagaaataa | atgtttctga | 180 |
| gtgcaaaatg | agagtgaaag | atgcagaaaa | gaaaaaaaat | cttaatctta | tttgagaaga | 240 |
| gggaaacctg | aaagcacctg | cttctaacct | atgttcagaa | ttaacttatg | agttattatg | 300 |
| tgcaaatcct | ctcagcacta | aacttcaatg | caggtgacaa | ccaatccgta | aacacaaaaa | 360 |
| acttttttga | agagtttgca | ttgataatta | taattntgga | aacatatttt | tttaact | 417 |
| <210> <211> <212> <213> | 1438 479 DNA Glycine max | • | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| tagttggatg | anattccatg | atcacacctt | atagtaagta | gataaacatc | ctanatcagg | 60 |
| aagaacaagt | tgatctagct | acctagaaat | caaatgtgta | atcctaacct | atgaagtatg | 120 |
| ccagggatgt | cctaccttct | ctcttacata | ttgcggcaga | gcaattgatg | ccaagttgca | 180 |
| cacagccgtt | tctgttggac | ttgtatactc | aattatctca | gtgcacaagt | ttcatgactt | 240 |
| gattgtgccc | aaattctgtt | ggttgctttt | cctattgcaa | gtgtcctagg | atatagaaaa | 300 |
| atgaagaggt | ttcaatgaaa | ataaatacaa | aatgcactga | cagaaactta | gcaaaagtca | 360 |
| aacaagcatt | tgtaaaccac | cttataaaat | atgtaaggag | ttccagtttc | tatctgtgac | 420 |
| ttcaaaattt | caaaccagag | agattetata | cctgaacaac | cttctttact | tttccccat | 179 |

| <210> <211> <212> <213> | 1439 436 DNA Glycine max | |
|-------------------------|---|-----|
| <223> <400> | unsure at all n locations 1439 | |
| agctntgatg | g atgtcgagaa gaaatcacat gtttgtcatc atcaaaaagg ggagaatgtg | 60 |
| attgtatgta | a tacatgattt tgatggtgaa gaatcaaaac aaggcttatt tgcttcaaga | 120 |
| ttaatacaag | g attgtttcaa caaacaaagc cttgattcaa gatttcttca agatcaagcc | 180 |
| ttacctcaaa | a acgaaaggtt tcaagtcaac caaggcacat gtaattgatt accaatacat | 240 |
| gtaattgatt | accaatggtt tgaaagtgtg taatcgatta ccagagactt tgaacgttgg | 300 |
| gaattcaaat | tttaaatgaa gagttacaac tattcaagaa aaataactat gtaatcgatt | 360 |
| acactaatgö | tgtaatcgat taccagagag gattntcaac gaatatcgcc aacaatcaca | 420 |
| tcttatcatt | tggatt | 436 |
| <210> <211> <212> <213> | 1440 487 DNA Glycine max unsure at all n locations | |
| <400> | 1440 | |
| tctgcttatg | tggcagggcg ggctaccttc actttcttgt ctccaacgcg agctgtgacc | 60 |
| actgttcttc | c cttcccgcga tgcttctttt catgtccgcc tgagtgggct tatagcctaa | 120 |
| accatacttc | c ccacgatttc cttgggcatt tatcaggcta gttatgccgc cgttgtcttt | 180 |
| gcctaaaccc | c attctgggtt cataaccgtt ccccaacata actcgggcca tcattactgc | 240 |
| tgcatcggac | agacaagget geccagagag ggaatecaeg gaggaaatge tgaceaeete | 300 |
| anaagactgg | g aaageggttt etaaegatte ttetgegget teeacataag geatagagga | 360 |
| tgggcagctc | accaagatgt cttcctcgct tgacacgatg accaagtgcc cctccactac | 420 |
| gaatntcaac | c. ttttggtgga gcgtagaggg cacaactccc actgagtgga tccacaggca | 480 |
| ccccaac | | 487 |
| <210> <211> | 1441 417 | |

| <212> <213> | DNA Glycine max | |
|----------------|--|-----|
| <223> <400> | unsure at all n locations 1441 | |
| agcttcttat | tcaatgctca tcttggtggt gaagctcctt cttccatggc ttattcctta | 60 |
| atggatggcg | cctcctctca cctcttctcc tttgtcttcc gctgcatctc catggtggaa | 120 |
| aatcaccatt | aaaggacctc attgaagctc anagatccag cctccataga agccccacaa | 180 |
| gcaagcttcc | atcacattnt aacgtccctc ttgattctga accatatatt ccaatcaaga | 240 |
| gatctttctt | gatcggtgtt gctgtggttg tgtcatttgg ttaccgcaaa gagcatgatg | 300 |
| actcttgggt | aaaaaagggt gctcaaccaa atgatgatga aggagaatta ccggttgaag | 360 |
| gggactcttc | tcttctttag agtattttga caggnttgat ggactcanac ctatgtg | 417 |
| 010 | 1440 | |
| <210> <211> | 1442 428 | |
| <212> | DNA | |
| <213> | Glycine max | |
| <400> | 1442 | |
| cctctatgtc | tagactctct taacatcaaa ggattcttga gtaaaagttt agaaatgtta | 60 |
| aagtttcaag | agaagttgac aaagtcataa ttcaatcccc atttcttatg acattctgat | 120 |
| cacttcataa | tcaccagcat tgacattttc ataagaagga gtggaccgcc caacaccacc | 180 |
| agatttttgt | gcattatect ettecataae actettaeet eccaegeatt tattttgttt | 240 |
| gtgctcatag | tgaccacatc taaaatagat ggggtgcaac catteatact caagaaacat | 300 |
| gggatatccc | ctaaccataa tgtgcaaagt caattgtcta tccaaatcaa tttcgacaca | 360 |
| tatacgtgtg | aatttaccct agattgtatg gacgtcaaat tattaatctt aagcatgggt | 420 |
| tctagcat | | 428 |
| <210> | 1443 | |
| <211> | 425 | |
| <212> | DNA | |
| <213> | Glycine max | |
| <223> <400> | unsure at all n locations 1443 | |
| agcttaccta | caagteetaa ttgteattet ataetagaat caatteaett tagaeteeaa | 60 |

| tttccactaa | tccccanagt | tggcttctct | aaccctcaaa | atctcacact | tttctaccta | 120 |
|-------------------------------|-----------------------------------|-------------------|------------|------------|------------|------|
| caacattgtc | attctcacat | ttaaccctaa | attaaccttc | cccatcatct | ctaccagttt | 180 |
| tctatcaaca | aatttcagca | cacaaacctc | acaaagcatc | accataaaac | cctaaaatag | 240 |
| aatgggtaaa | tttgactcac | atccaacatg | tcaagtttag | catgctttca | acaaatttct | 300 |
| tcacaaataa | ctaccataag | gcattaacct | agtaaaacta | cccatcatat | ctcccaaaaa | 360 |
| cccaataccc | acgaaattca | tgtgagaaga | agtccaccca | aacctgaaat | tcgaagtccc | 420 |
| acaat | | | | · | | 425 |
| <210> <211> <212> <213> <223> | 1444 381 DNA Glycine max | k all n locati | ions | | | |
| <400> | 1444 | | | | | |
| tgcccaggcg | agcaagggtg | cttcctccag | aagcaacaac | cttctggagg | aagaatatgg | . 60 |
| aaggcccaag | tgggcctgat | tgctatttgt | gcccccttt | ttactaaatg | cacctccctt | 120 |
| ctatttttt | ggtgattctt | tttccgtaac | gttacgaaac | tttacgaatt | tcgtaacgat | 180 |
| acttattttc | tttccgtaag | gttacgaatc | cttacggatc | atgtatttac | tctnttttag | 240 |
| ctntcgaaga | agttacggaa | actcacggat | tgcacaacaa | cacctccttt | tggtttccgc | 300 |
| cacactacgg | aatttcacgg | atcgcataac | cttgcttact | tttgacttcc | ggcgcgtctc | 360 |
| gagacttaca | tattgtgcaa | С _ | | <u>.</u> | md. | 381 |
| <210> <211> <212> <213> | 1445 329 DNA Glycine max | c c | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| agcttctccc | ctatnttgct | atatataggg | ggagaagtga | agaagaaaag | ggttcagcct | 60 |
| cttaggcact | tctctctc | tcaaaagtgc | tgaggaaaat | tatttccgtg | aagaanatcc | 120 |
| aagccgaggc | gcttccgtaa | cgtttccgtg | agtaattacg | cgaagattct | cgaccgttct | 180 |

tcaagattca tctttcgttc ttcattttct tcaaacttca acgggtaagg acctcaaacc 240

| gagcttttcc | atttattcta | taggcccgcg | gggggtacaa | cattggttac | aggaatttta | 300 |
|----------------|-----------------|--------------|------------|------------|------------|------|
| | ccattggctt | | | | | 329 |
| attetegett | ccarrygerr | | | | • | |
| <210> | 1446 | | | | | |
| <211> | 345 | | | | | |
| <212> <213> | DNA Glycine max | ζ | • | | | |
| , | | | | | | |
| <223> <400> | unsure at a | all n locati | lons | | | |
| ttacggacct | atgaaactca | gcttggagaa | aacaagttct | ggtcatatga | gctattntgc | 60 |
| tagtttagtg | ttaggagtgt | aaaggctntg | tgggatcctc | tcacccgcag | accettett | 120 |
| ttgttcaaag | ggatgtgaac | aaagtagcta | atagtttggc | ţtctttagct | tccctttttg | 180 |
| aggatagagt | ttggattgag | gaagtttccc | ctcatattct | ttcccttgtc | aatgatgact | 240 |
| tacgacctct | agccattgtc | actaaatcaa | catccgttca | ctcccctatt | acgacgacct | 300 |
| ctgccatata | caaccttgaa | ccagcgtctg | cgataacaaa | tcaaa | | 345 |
| 010 | 1 4 4 7 | | | | | |
| <210> <211> | 1447 409 | | | | | |
| <212> | DNA . | | • | | | |
| <213> | Glycine ma | x | | | | |
| <400> | 1447 | | | | | |
| agcttgccta | attaacctga | aattgagaca | aaatgattat | taaacacaca | aaatgaaaat | 60 |
| actaagtatt | tattacctat | acttaacaga | aaatacttat | aacactacaa | aataaccata | 120 |
| aattgggaga | gtttgataca | atttatacaa | gttttataca | caaaagttag | tcgttttcat | 18.0 |
| cgactaacac | atgtacacta | ccaccacatc | ctccacaatg | agaagagtga | aagacaaggg | 240 |
| taaggaatcc | ctaatagaat | tggaagaggg | tccaaaggta | tgtggaatgg | agacacgcaa | 300 |
| caactgcttc | tgaactaagt | cataggtagg | aactgtagga | ctcgataaaa | tctagtggac | 360 |
| tgcctcaagg | ttcgatgtga | gtccaacaag | aacaaccacc | atgaaaaat | | 409 |
| | | | | | | |
| <210> | 1448 | | | | | |
| <211> | 439 DNA | | | | | |
| <212> <213> | Glycine ma | × | | | | |
| | - | | | | | |

| <400> | 1448 | | | | | |
|-------------------------------|-----------------------------------|-------------------|------------|------------|------------|-----|
| tcgtccgtag | atccctcatg | taagaatggg | cctatactaa | acagcattat | tgtaacagca | 60 |
| taattaaaac | caaaacttaa | cccgcaaatc | cctcatgtaa | ggctaagttt | caatcctgct | 120 |
| tcaatcaagt | tctaaggcaa | tagtacattt | tccaatgcta | aagtcaccta | actatgcaca | 180 |
| caaatgggtg | atcagaccaa | aagcatacaa | acattaagca | ttgagggaag | cattgaacac | 240 |
| agaaaacata | atcaattaga | tattaggtat | ttacatcagt | tgttcattag | aaatccccaa | 300 |
| ctagggtgtt | taaccaacca | ttacaaagaa | accctaacaa | taaatgagat | taaaagtaga | 360 |
| gaatgatagt | tccttacaca | agaagaggga | tttctcctcc | tcttctcagc | atctcacact | 420 |
| cactctctac | tcaataatc | | | | | 439 |
| <210> <211> <212> <213> | 1449 458 DNA Glycine max | K | | | | · |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| agcttganat | tgaacaacgg | aagctctcca | gatactctta | tggtcataac | ttatcacacg | 60 |
| gaggtccaat | tgaggcgcat | aatatatcga | gacgctcgaa | attaaacaac | gaatactctc | 120 |
| gagaaattca | aatggtcgta | acttatcaca | cggaagtccg | attcaggtgc | ataatacacc | 180 |
| gagacgctca | aaattgaacc | acgaatgttc | tcgagaaatt | caaatggtca | taaattttca | 240 |
| aacggcagtc | cgatttaggc | gcataataca | tcgagaatct | tgaaattgaa | caacggaagc | 300 |
| tatccagaaa | ttcaaatggt | cgttacttgt | cacacggaag | tccgattcag | gcgcataata | 360 |
| tatcgagacg | ctcgaaattg | aanatcggaa | gctctcgaga | nattcaaatg | gtcgtaactt | 420 |
| ttcaaacgga | aagtccgatt | aagcgcataa | tatatcga | | | 458 |
| <210> <211> <212> <213> <223> | | x all n locat: | ions | ; | | |
| <400> | 1450 | | | | | |
| taacanaagg | catgcgaagt | gggtggaatt | cctagagcaa | ttcccttatg | ttatcaaaca | 60 |

| taaaaaggga | aaaggtaata | ttgtagccga | tgctctttct | cggcgtcatg | cattactttc | 120 |
|----------------------------------|-----------------------------------|--------------|------------|------------|--------------------------|-------|
| tatgcttgaa | acaaaattga | ttggtcttga | atgtttgaaa | agcatgtatg | aaaatgatga | 180 |
| aacttttgga | gaaattctta | aaaattgtga | aaaattttca | gaaaatggtt | tctttagaca | 240 |
| tgaaggcttt | cttttcaaag | aaaacaaatt | gtgtgtgcct | aaatgttcta | ctagaaattt | 300 |
| gcttgtttgt | gaagcacatg | aaggaggttt | aatggggcat | tttggggtcc | aaaagactct | 360 |
| agaaacatta | caagaacatt | tttattggcc | tcatatgaaa | aaggatgtgc | agaaattttg | 420 |
| tgaacattgc | attgtatgta | aaaaggcana | gtcta | | | 455 |
| <210> <211> <212> <213> | 1451 440 DNA Glycine max | c | | | | |
| | unsure at a | all n locat: | ions | | | |
| agcttagtat | ttatatttat | tactacactt | catgtaatac | tatactgaaa | cagagtaaat | 60 |
| ttggaacttg | aatgaaaacc | tacaaattac | taccttcccc | aatagataga | agtagttcaa | 120 |
| cacaagactt | agctccccca | gctaaggcta | tgtgaaggga | aatgccattg | tgcatattgc | 180 |
| gaatgttcac | atcaacacca | gcaataagaa | taacatactc | aaaacacaaa | aaaacagaac | 240 |
| ttagttaaca | ttagatacaa | aaggcacata | cttcagatac | caacatgata | ttgaatattg | 300 |
| atggatattt | aattattcta | atgaagaatt | tggtttactc | accttaacca | attcatcatc | 360 |
| gtcaatcata | acagctcact | actagaaaat | aagggtttca | catcggttat | ttaagacttt | 420 . |
| caacatcggn | tattaatcga | · · | | · | | 440 |
| <210> <211> <212> <213> | 1452 396 DNA Glycine ma: | × | | | | |
| <223> <400> | unsure at 4 | all n locat | ions | | 4.) . | |
| tgacacagtg | cttgtacaga | gctcatctcc | acccgcagca | cataagaaat | tatgtggaan | 60 |
| aatgaagata | aactgtgtta | agcaagacca | aaaaacatac | aagaagatac | tgtcagtttg | 120 |
| tttcactaat | taaatcaaat | aacaggtttt | tgtagcttat | atatatcatt | aagaaaccag | 180 |

| tacggcagta | cctgaaggaa | gtgaattgtc | ttttaatcga | gtcagaaacc | agtatatatc | 240 |
|-------------------------------------|--|-------------------|------------|------------|------------|------|
| atttaagata | tgtaagtgag | tgttgtcttt | tcagacaaat | gaagcattag | cgaagcgaag | 300 |
| acacatcatc | atgttgtgca | tgtggaggtg | gcaggagctg | aactgcatat | tcaattctat | 360 |
| gtgggcacgt | taaggtggaa | aatgacactg | gctggc | | | 396 |
| <210> <211> <212> <213> <223> <400> | 1453 419 DNA Glycine mas unsure at a 1453 | x all n locat: | ions | | | |
| agcttgattg | tagcagtgaa | tataaaacaa | acttaacgat | agcaacagaa | taatttttac | 60 |
| aaatttaata | ccattcatca | attnttcatc | actttttcat | cttcaataca | aatgaaaata | 120 |
| ttatgttagt | gaactattca | tcacttttt | cattcattnt | ttttttatca | atggtagaca | 180 |
| tttatacatt | gatattccat | ataatcaact | atagactaat | agataatagt | gtcactaata | 240 |
| tcttctcgta | tacaatcatt | ttgtatccta | tctttcttg | tatggccaca | cattcattta | 3.00 |
| atatacctat | ttctaacact | taaactatgt | aaggaataca | ccaataggag | aggcacaacc | 360 |
| aatatacatt | tgtctgatat | cccanaaaag | catgataaaa | tatacatatc | attctaaac | 419 |
| <210> <211> <212> <213> | 1454 414 DNA Glycine max | \$ | | | | |
| <223> <400> | unsure at a | ill n locati | ons | | • | |
| ttatattcat | gaattgctaa | gcgaaattca | ggattgttcc | tcagtacact | aacattatgc | 60 |
| aaaatataga | actttgcttc | ttccatattt | taactcagta | gattccaaat | atcttttctt | 120 |
| atagatgttt | caatttgatc | acctttattc | catattaaaa | tgaaacttgg | tgtaaggcat | 180 |
| aattttttt | tgtcttatat | taattaagaa | ataaataacc | tatacacaca | aaaaattcat | 240 |
| acctggctat | caaacaaaat | cattttgaac | ctcacaattg | gatttccatt | aatgtggtca | 300 |
| actattttc | atagcttatt | gacttgagcc | ttcacaatct | agcaggtaat | agaaggagta | 360 |
| atageettea | ttanaattaa | catotatoot | anaatttaa. | taaaattaaa | 2022 | 111 |

| <210> <211> <212> <213> | 1455 455 DNA Glycine max | ς | · | | | |
|---|---|---|---|--|--|---------------------------------|
| <223> <400> | unsure at a | all n locati | ions | | | |
| agcttctccc | ncaattntct | ataaataggg | ggttaagtga | agtagaaaag | ggttcagccc | 60 |
| cttaggcact | tctctctctt | tcgaatttgc | ttaggaaaat | tgtttccatg | aagaaaatcc | 120 |
| aagccgaggc | gcttccgtaa | cgtttccgtg | agtgatttcg | cgaaggtttt | cgactgttct | 180 |
| tcggcgttct | tcattcgttc | ttcatcgttc | ttcagtcttc | aacgggtaag | tacctcaaac | 240 |
| caagctttcc | aattcattct | atgtacccgt | ggtggtccac | atttggtttc | atgtatttt | 300 |
| attctcgttţ | cattcacttt | ttataccccc | ttttgacgtg | cttaagccat | tntatttaag | 360 |
| tcatttctcg | cttaacctag | aaataaaata | aatttccact | gatcgtttga | attgtattat | 420 |
| ccgttaactt | tgggtgagat | gaattccgac | cgatc | | | 455 |
| <210> <211> <212> | 1456 431 DNA | | | | | |
| <213> | Glycine max | | | | | |
| <213> <223> <400> | Glycine max | all n locati | ions | | | |
| <223> <400> | Glycine max | all n locati | | cattaaagac | ttttccaaaa | 60 |
| <223> <400> atatagagtt | Glycine max unsure at a 1456 | all n locati | attgatgatt | | •• | 60 |
| <223> <400> atatagagtt ttgctaaacc | Glycine max unsure at a 1456 tttgggtcat | all n locati gctggattct ctgatgaaca | attgatgatt aggatgctgt | gtttatgttt | aatgatgaat | |
| <223> <400> atatagagtt ttgctaaacc gcttagaagc | unsure at a 1456 tttgggtcat actgagtaat | all n locati gctggattct ctgatgaaca cttaaagcca | attgatgatt aggatgctgt agttggtctc | gtttatgttt tgctcctgtg | aatgatgaat attacagcac | 120 |
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| <223> <400> atatagagtt ttgctaaacc gcttagaagc tagactgggg tgctgggaca atgatgctca | unsure at a 1456 tttgggtcat actgagtaat ctttaatacc actagagttt | gctggattct ctgatgaaca cttaaagcca gaattaatgt agaattttc | attgatgatt aggatgctgt agttggtctc gtgatgcaag ataccatcta | gtttatgttt . tgctcctgtg tgattatgca ctatgccagg | aatgatgaat attacagcac gtangtgctg aaagtgttga | 120 180 240 |
| <223> <400> atatagagtt ttgctaaacc gcttagaagc tagactgggg tgctgggaca atgatgctca | unsure at a 1456 tttgggtcat actgagtaat ctttaatacc actagagttt gggaaagggc | gctggattct ctgatgaaca cttaaagcca gaattaatgt agaatttttc gccaccactg | attgatgatt aggatgctgt agttggtctc gtgatgcaag ataccatcta agaaagaatt | gtttatgttt . tgctcctgtg tgattatgca ctatgccagg gttggcaatc | aatgatgaat attacagcac gtangtgctg aaagtgttga gtttatgcac | 120 180 240 300 |
| <223> <400> atatagagtt ttgctaaacc gcttagaagc tagactgggg tgctgggaca atgatgctca | unsure at a 1456 tttgggtcat actgagtaat ctttaatacc actagagttt gggaaagggc gatcaattat ccgatcttat | gctggattct ctgatgaaca cttaaagcca gaattaatgt agaatttttc gccaccactg | attgatgatt aggatgctgt agttggtctc gtgatgcaag ataccatcta agaaagaatt | gtttatgttt . tgctcctgtg tgattatgca ctatgccagg gttggcaatc | aatgatgaat attacagcac gtangtgctg aaagtgttga gtttatgcac | 120 180 240 300 360 |

| | Glycine max | ĸ | | | | • |
|--|--|--|---|---|--|---------------------------------|
| <223> <400> | unsure at a | all n locat: | ions | | | |
| agctaggcat | tntaagtgag | tctaatctca | cttgagccaa | tatggtagcc | tacattcatt | 60 |
| tcatgtacat | attcattatc | atttttatgt | ttgttttgtg | catttgtgtt | tgtttgtttg | 120 |
| ttatatgtac | atttagaaaa | catgaaaacc | tttttagcat | gttatttcta | taaaaaaaat | 180 |
| ttgcactatc | attcatgata | attgattacg | agactttgta | atcaattaat | tcgacctgag | 240 |
| gttactatct | tagtgtcttt | aggttagcca | gtaattaatt | acattgtatg | gtaatcgatt | 300 |
| accacctgca | ccctttctag | gtagagctat | aacaattata | ataattggta | atcgattacg | 360 |
| cagggtttga | aacattttt | tttaaatgaa | aagacactcg | ctttgcttta | tatacagcat | 420 |
| acctagacct | aaattettae | t | | | • | 441 |
| <210> <211> <212> <213> | 1458 468 DNA Glycine ma: | × | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| | | | | | | |
| tcatcttcaa | tccanaaaga | aagtgataaa | gaagacttaa | ttgatttgaa | tgaagatgat | 60 |
| | | | | ttgatttgaa aaatcagagg | | 60 120 |
| gatettagee | tttntgtana | aaggttcaac | aagttcctga | | aaatcaaagg | |
| gatcttagcc | tttntgtana | aaggttcaac aagaaggaca | aagttcctga aaagattcat | aaatcagagg cctctactcc | aaatcaaagg | 120 180 |
| gatcttagcc agaccaaatt gaatgcaatc | tttntgtana ttaaacctaa aacctgaaca | aaggttcaac aagaaggaca tctgagggtt | aagttcctga aaagattcat gattgcccaa | aaatcagagg cctctactcc | aaatcaaagg aaaatgcttt aagaatggag | 120 180 |
| gatettagee agaccaaatt gaatgcaate aaatetgaaa | tttntgtana ttaaacctaa aacctgaaca agaaaaattt | aaggttcaac aagaaggaca tctgagggtt tagtgaaaag | aagttcctga aaagattcat gattgcccaa aagatgaaga | aaatcagagg cctctactcc tcttcaagaa | aaatcaaagg aaaatgcttt aagaatggag cacatgggat | 120 180 240 |
| gatettagee agaceaaatt gaatgeaate aaatetgaaa gacaatgata | tttntgtana ttaaacctaa aacctgaaca agaaaaattt tggaatcata | aaggttcaac aagaaggaca tctgagggtt tagtgaaaag tgaggattta | aagttcctga aaagattcat gattgcccaa aagatgaaga gaanattaag | aaatcagagg cctctactcc tcttcaagaa aggcctacat | aaatcaaagg aaaatgcttt aagaatggag cacatgggat gtgtctaatg | 120 180 240 300 |
| gatettagee agaccaaatt gaatgcaate aaatetgaaa gacaatgata gctaaaagtt | tttntgtana ttaaacctaa aacctgaaca agaaaaattt tggaatcata | aaggttcaac aagaaggaca tctgagggtt tagtgaaaag tgaggattta tgaagaggta | aagttcctga aaagattcat gattgcccaa aagatgaaga gaanattaag acatcttcaa | aaatcagagg cctctactcc tcttcaagaa aggcctacat agataaactt ataacaactt | aaatcaaagg aaaatgcttt aagaatggag cacatgggat gtgtctaatg | 120 180 240 300 360 |

| ctgctgatat | tcgacantct | gagcaataag | cctnnaaacc | tatacaagat | aatgctacgg | 60 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| cggacgcttn | catacagcca | gngaagttga | actggtgcta | cagcccgcaa | taaacttggg | 120 |
| ccgagacaga | aacacgacgg | gtttcaatcg | gaggtatagt | cctcaagcct | acccttatgg | 180 |
| tttgcctcca | gacttctctt | cccgtaccgc | tccaggcgat | atgagccaag | cccctacctt | 240 |
| cgaagggtag | acttctcctc | acgctcacta | ttctntgtag | aagatgatta | tggagatgcc | 300 |
| catttacgac | cttacttctc | cttatggaac | cagtcccgca | tgaattgtcc | tatcatccta | 360 |
| ctcgtgcctt | actatttata | cgtacattta | agaattgtcc | ccttggcatt | aaatgttcca | 420 |
| tagtttactt | atcaatccca | tgggtttctc | ggcatttgct | ttccttttaa | acacacatta | 480 |
| tattatacaa | accccttgcc | С | | | | 501 |
| <210> <211> <212> <213> | 1460 465 DNA Glycine max | ς . | | | · | |
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| tagaaaggtc | tactcanatg | gatgtatgtt | aagttgataa | gtaaaaaaaa | atgcaaaaag | 60 |
| tagaanatgc | aggatcatca | cgtgcccatt | gattcttggt | ttctaatatc | aaataattaa | 120 |
| taacaagaag | aaattcaatt | aaataatttt | ttgaaatcac | caaatttaat | ttcctaattt | 180 |
| gataaatcaa | aggcattaat | tatataacta | aaccttacca | tgaaaaattg | gcatcattat | 240 |
| gtatccttct | actcctattt | taaattttat | tatattgaac | ttatattttt | ttagtcaaca | 300 |
| ttgccaagat | gtggatcagg | tttggccttc | caaagacaat | atcaatgatt | tataataatt | 360 |
| tatcaaatca | tttgatattt | tgatttataa | taatttaaga | caatatcaat | gatttatatt | 420 |
| aatttataca | ctctgatgaa | ctanatccct | tgacaaatag | ttaat | | 465 |
| <210> <211> <212> <213> | 1461 312 DNA Glycine max | | | | ,a. | |
| <400> | 1461 | | | | | |
| gcgagctagg | cgaacttgat | atttgcagat | cgctgatcca | tcttcttctg | taagagcgca | 60 |

| taatgcactg | ggcgcatcat | gattggctga | gcgcatagaa | caatctggaa | aaagatgacc | 120 |
|---|-----------------------------------|--------------|------------|------------|------------|-----|
| tgtacatgtg | cgtagagcga | gagtcaaact | tgcttaacgc | accgcttgca | cctccaggct | 180 |
| gagcggcaaa | aaggggcgct | acacctcatg | tcacttaatt | tggctaggcg | aaccataatg | 240 |
| tggctgatcg | aacgaccaat | tatcagcatc | actatttaga | gactgaagtc | agatatggaa | 300 |
| gagaggacca | at | | | • | | 312 |
| <210> <211> <212> <213> <400> | 1462 410 DNA Glycine max | · × | | | | |
| agcttgtagg | attatggcgt | acttatcaca | tgtggtacta | cgtggcggtc | gggcgatggc | 60 |
| • | | • | | caccatcccc | | 120 |
| | 1 | | | cgtttctctc | | 180 |
| | | | | acaacattca | | 240 |
| | | | | ctgccaaaac | | 300 |
| | | | | tccttcctgc | | 360 |
| | tcgaaaatta | | | | · , | 410 |
| | | | | | | |
| <210> <211> <212> <213> | 1463 444 DNA Glycine max | | | | · | |
| <223> <400> | unsure at a | all n locati | lons | | | |
| agctnttgaa | atcaaactnt | atcactggta | atcgattaca | ggaaactgat | aatcaattac | 60 |
| cagagagtaa | atactctggt | aacttagaaa | attttgagaa | aactcttttt | gtaaaacaaa | 120 |
| actatgctat | gtttggtttt | tgaaaaatcc | ttttcaatac | ttcccttgtg | aattcatctt | 180 |
| ctcttgaatc | ttgattcttc | ttgatgtctt | ttcttgaatc | ttgaaatcaa | cttctcttga | 240 |
| atcttgaatc | ttcttgattt | cttgaacttg | ttgactcaat | cttgacatca | ttctttnggg | 300 |
| ctttttgtca | tcatcaaaac | tacttgaatc | atacttgatt | cattatcatg | aagctggctt | 360 |
| ctacaatctc | cccttntttg | atgaggacaạ | ccctgaaatc | aagaaacaca | tacacattcn | 420 |

| tttttctagt | cgatcactca | ctta | | | | 444 |
|----------------------------------|-----------------------------------|--------------|------------|-------------|------------|------------------|
| <210> <211> <212> <213> | 1464 459 DNA Glycine max | ς | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| gggttcgagg | tacttacccg | ttgaagatcg | aagaacgaat | gaagaacgtc | gaagaacggt | 60 |
| cgaaaacctt | cgcgaaattc | ctcacggaaa | acgttacgga | aacgtttcgg | aagcgcctcg | 120 |
| gcttagattt | tcttcacgga | aacaattttt | ccaagcaaat | tcgaaagaga | gagaagtgcc | 180 |
| taaggagctg | aacccctttc | ttcttcactt | cctcccctat | ttatagcaaa | ataggggagg | 240 |
| tgcttgctgc | ccagctcgcc | caggcgagcc | aggttgcttc | ctccagaagc | aacaaccttc | 300 |
| tggaggaagc | ttctggaagg | cccaagtggg | cctgattgct | atttacaccc | cccttattac | 360 |
| tanatgcacc | cgcctttcta | ttatttgtaa | ttctntntcc | gtaacgttac | gaaactntac | 420 |
| gaaattcgta | acgatactta | ttttcctttt | cgcagggta | | | 459 |
| <210> <211> <212> <213> | 1465 397 DNA Glycine max | | | | | |
| <223> <400> | unsure at a | ill n locati | lons | | | |
| agcttgtgcc | ttttcacgtc | tggaatatga | atgtagcata | tagatccaaa | gacccttagg | 60 |
| tgctttgctg | atggcttctt | cccgttccaa | gcttcaattg | gagtcttgtc | ttttacagac | [.] 120 |
| ttagttggac | atctgttgag | tatgtaaaca | gcagtgtaga | ctgcttcaac | ctagaatgtg | 180 |
| ttaggtagtc | ccttctcctt | gagcatcgat | ctagccattt | ccataactgt. | gcgattcttt | 240 |
| ctctcggaca | ctccattttg | ttgaggagaa | tatgcgattg | taagttttcg | ctcaatgctt | 300 |
| tcatcctcac | aaaatctttc | aaactcgcga | gatgtgtact | ttntgttgcg | atcacttctt | 360 |
| agtactttta | tccgttttcc | acttttgatt | tcagcaa | | | 397 |
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| 0.1.0 | | | | | |
|---|--|--|--|--|---------------------------------|
| <212> <213> | DNA Glycine max | | | | |
| <400> | 1466 | | | · | |
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| aaaaaattġc | aatagttgta gtatggtaat | atatgcttct | caccgaaccc | tctctggaat | 120 |
| ttgagactac | tctctctgta gtctttaagc | tatagttctt | ttgcctcttc | aatttttgtt | 180 |
| ataccctttt | tagctgtttt ttgatgcatt | atttgtagct | gattattaga | tttgactgct | 240 |
| tgtggacaat | aatttctagt ccatattctt | tataaaaatt | gagaatgact | ctgatatgct | 300 |
| ttagcttttt | aaacaaacct ttggccggca | ccaaatactg | ttactttata | tacttataac | 360 |
| tcaattgcag | gtatagattg gcatattcat | caaactatag | ccatatcttg | gatccgttaa | 420 |
| ttgagaacaa | ttaccaatta ttcatgatcg | agaggcttat | aatg | | 464 |
| | • | | | | |
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| <211> | 382 | | | | |
| <212> | DNA | | | | |
| <213> | Glycine max | | | | |
| <223> | unsure at all n locat | ions | | | |
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| <400> | | | aacatggcag | aaggccgaaa | 60 |
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| <pre><400> agctttntag ttccaccata aaattgtcta gcctctattt tagcttaaga tcatgtgaga</pre> | gatagcaatg ttatcaatgg taaacatacc attgcacctt tggcagttgg gaaaaaatcc aatagcactg tagggtagtc agcatagaag attgaaaaac | cagatagcgg atgtcaccac gccatgccat taacaacatt ttgtcttnt | catggcagac tccaccatgc ttccaagttt gttaaactaa | ctcccttcac cagtcccatg aatgacattc caaaaactag | 120 180 240 300 |
| <pre><400> agctttntag ttccaccata aaattgtcta gcctctattt tagcttaaga tcatgtgaga ttatattgca</pre> | gatagcaatg ttatcaatgg taaacatacc attgcacctt tggcagttgg gaaaaaatcc aatagcactg tagggtagtc agcatagaag attgaaaaac cacattcaaa gcctgttaaa tggtcccata ct | cagatagcgg atgtcaccac gccatgccat taacaacatt ttgtcttnt | catggcagac tccaccatgc ttccaagttt gttaaactaa | ctcccttcac cagtcccatg aatgacattc caaaaactag | 120 180 240 300 360 |
| <pre><400> agctttntag ttccaccata aaattgtcta gcctctattt tagcttaaga tcatgtgaga ttatattgca</pre> | gatagcaatg ttatcaatgg taaacatacc attgcacctt tggcagttgg gaaaaaatcc aatagcactg tagggtagtc agcatagaag attgaaaaac cacattcaaa gcctgttaaa tggtcccata ct | cagatagcgg atgtcaccac gccatgccat taacaacatt ttgtcttnt | catggcagac tccaccatgc ttccaagttt gttaaactaa | ctcccttcac cagtcccatg aatgacattc caaaaactag | 120 180 240 300 360 |
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| tagctacaca | cacccctctc | ataactaagc | tcacctcctt | gataagcttc | cttaagaaga | 120 |
|-------------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| ttcctaaaga | agctagagct | tagctacaca | tacctctcta | atagctaagc | tcacctcctt | 180 |
| gagatgagaa | gctagagctt | agctacacac | cccctataat | agctaagctc | accctcatga | 240 |
| cgaaatacat | gaaaatacaa | aataagtccc | tactacaaag | actactcaaa | atggctcgaa | 300 |
| atacaaggct | aaaaccctat | actactagaa | tgaccaaaat | acaaggccta | agcgaaggag | 360 |
| aaacttattn | taatatttac | aaagataagc | gggctcatac | ttagcccatg | | 410 |
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| <u>.</u> | 1103 | | | | | |
| agcatacaaa | actaattttt | gggcctctat | atgtctgagg | gcċcaattac | aaaaatacag | 60 |
| catacaaaaa | tgacatacta | taaaactgga | cgacaaataa | aattgtcttc | tctcttcaag | 120 |
| tccaagccgg | ttcagcccaa | ttccagatcc | aagctcaatc | gcttataatt | ctcctgaaat | 180 |
| taaattaaaa | cacagaatta | gtcaagtagg | ctcaaatgat | aaaactgcat | aattaatttg | 240 |
| acaattaacg | ctaatcacta | attaaaatgg | tgacagaaag | gggtaagaaa | tatgagaaaa | 300 |
| taatgacaca | tc . | • | | | | 312 |
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| tcattccttg | tttcactcat | gtgtccaagt | ctttgatggc | atatggttga | attgttgaca | 60 |
| gccttagtaa | ctgctaccat | atactcatct | gcaatcatgt | aaagagatcc | tcgcttcttt | 120 |
| ccacgagcca | caatgagatt | gccttttgtt | accttccaag | ctctatatcc | aaaagtggtg | 180 |
| taatgcccct | cattatccaa | ctaccctata | gatgttagat | ttccctttaa | ggcaagaata | 240 |
| tgtcaaacat | tgtacagtgt | ccatagggat | ccactagagg | tcgtgatgtc | aatatcacct | 300 |
| çttccgacaa | tgtca | | | | | 315 |

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|---|--|---------------------------------|
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| gcacaacaag | ctttcctcat ccacaatgcg cgcataaacc caccatcccc tgttgcccac | 120 |
| ctccaactga | gctcacgtac tcccacgtag cccatatcct cgtttctctc aacaccgggt | 180 |
| ccccatcaat | cctctcaagc ttccacaaca tccaagaaaa acaacattca aacagcacaa | 240 |
| gctatcacag | ccaagcaaaa cagagcanag gcagaaaact ctgctcaaca catcaaccaa | 300 |
| aatcacagct | tttctcactt atagaccaca gtaacaattc ctttgatcaa ttcgtaaccg | 360 |
| tggatcgact | caaatttact gaagctatag tgataaccta | 400 |
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| tgagatgagg | aagtgttgaa gggtgaaact tcctgtcttt attgttgacc acagagtggt | 60 |
| | aagtgttgaa gggtgaaact tcctgtcttt attgttgacc acagagtggt atgtcgcggn ggtcaggaga ccttggggac gtcaagtggg gtgctattgc | 60 120 |
| acctggagat | | |
| acctggagat | atgtcgcggn ggtcaggaga ccttggggac gtcaagtggg gtgctattgc | 120 |
| acctggagat ccaaaaccaa tgatgtacct | atgtcgcggn ggtcaggaga ccttggggac gtcaagtggg gtgctattgc gcttgaccaa tcccgaccca acccgggcat agtcggtcag tgagaacctg | 120 180 |
| acctggagat ccaaaaccaa tgatgtacct aagcaaggag | atgtcgcggn ggtcaggaga ccttggggac gtcaagtggg gtgctattgc gcttgaccaa tcccgaccca acccgggcat agtcggtcag tgagaacctg aagcaggcga gctcctggca gtcaacagat aaaaggaaaa caagaccaca | 120 180 240 |
| acctggagat ccaaaaccaa tgatgtacct aagcaaggag cctctggtaa | atgtcgcggn ggtcaggaga ccttggggac gtcaagtggg gtgctattgc gcttgaccaa tcccgaccca acccgggcat agtcggtcag tgagaacctg aagcaggcga gctcctggca gtcaacagat aaaaggaaaa caagaccaca gcttgtggtg gctggccagc tgtgaatatt gtgtaatatg tggatggtgg | 120 180 240 300 |
| acctggagat ccaaaaccaa tgatgtacct aagcaaggag cctctggtaa gaggctaaga <210> <211> <212> | atgtcgcggn ggtcaggaga ccttggggac gtcaagtggg gtgctattgc gcttgaccaa tcccgaccca acccgggcat agtcggtcag tgagaacctg aagcaggcga gctcctggca gtcaacagat aaaaggaaaa caagaccaca gcttgtggtg gctggccagc tgtgaatatt gtgtaatatg tggatggtgg tcgattacca agggtgggta atcgattaca aggcttaaaa ttgaggacag | 120 180 240 300 360 |

| gtaaatctaa | acatatatga | ttntttatat | cgattataca | aataattgat | ataaatatga | 60 |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| tattttttat | attaatgata | catat | | | | 85 |
| <210> <211> <212> <213> | 1474 462 DNA Glycine max | ¢. | | | | |
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| ntaatgctag | tccttgaagc | atatgaggtt | gccatatcaa | atattcacct | atcaagcatg | 60 |
| attctaaatg | cttaattgta | tttttaccct | aactttttat | gccaaaaatt | aaaaaaaat | 120 |
| gaaaatgaaa | aaatacaatt | aagccctaaa | atttagaaaa | tatctcttga | aacatttaat | 180 |
| tgctggaatç | tcttcatctt | gatgattatt | agttattata | cttggagcat | ctttttttag | 240 |
| gctacttgaa | gcattcttaa | ccaatttaaa | tatagtcatc | ccattaaatt | aagatgatca | 300 |
| tcatcagatt | tttttgatcg | aaattaatca | tttagtaaag | ttaaagacac | tatgcactgt | 360 |
| tatgagtaaa | aaaacaaatt | atagtactaa | tatctaaagg | aaaagctaat | aacactacat | 420 |
| aataaaaaat | aaccaataca | agtcaattta | aataaaaaaa | tt | | 462 |
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| cgcattgtcg | gactcccccc | acccttcctg | ctgagctgct | tcgtgtcggg | gttgtcgacg | 120 |
| gacattggcc | gcgaggtcca | ggcccaccaa | ccactgacac | tc · | | 162 |
| <212> | 1476 377 DNA Glycine max | | · | | | |
| | unsure at a 1476 | ll n locati | ons | | | |
| ggactcatgt | tatctacaat (| cacttottac | attaattatt | aagaaagtgg | tetaagagaa | 60 |

| <212> <213> | DNA Glycine max | |
|-------------------------------------|--|-----|
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| ccttggatct | tetteateaa tggaeteett tngettttga agateaatgg cageaaattg | 60 |
| gagaaggagg | aaaggtgatt ggagatgcca cttcaaggag aagatgagtc gagaacaagt | 120 |
| ttatcaccat | atgaagccat agataagagc ttgaagattg gagaaggtga gtggacggag | 180 |
| atggagagaa | ggggcaaaac atttatgcca aatgaggtct gaactttgaa gtgtaatttc | 240 |
| tcaaatgatc | aaagttgaaa aaatacacac ataaggcctc tatttataac ctaagtatca | 300 |
| cacaaaattg | gagggcaatt tgactttcta ttcaaatntc acttgaattt gtggaaccca | 360 |
| aattggagcc | aaaatttcac taattatgat tagt | 394 |
| <210> <211> <212> <213> <223> <400> | 5894 331 DNA Glycine max unsure at all n locations | |
| | 5894 | 60 |
| | aaaagatggc ctcagcaaat tccttatttc cagaagggaa ttctatcaat | 60 |
| | tctttaatgg agagggttac cactactgga aaacccgaat gcaaattttt | 120 |
| | tagatctaaa tatctgggaa gccatagaaa tagggcctta tatacccacc | 180 |
| | gagtttcaat agatggtagt tcatcaagtg aaagcataac tatagaaaaa | 240 |
| cctanagata | gatggtctga agaggataga aaacgagtac aatacaactt ataagccaaa | 300 |
| aacataataa | catctgccct gggaatggat g | 331 |
| <210> <211> <212> <213> <223> | 5895 387 DNA Glycine max unsure at all n locations | |
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| | ttgaacaagc aattaactcc tctntcagaa ccatgctatg tgctcgcgac | 60 |
| tggtctcttt | cttcccttcg caacttgagt tcactattgc taccccatag agctccgcga | 120 |

| aatttgttco | ggccatactc | ttccttgcga | gccctcttgg | tctcttgttc | aaaggctctt | 180 |
|------------|-------------|-------------|------------|------------|------------|-----|
| gcggtaattg | cattctcttc | ccgtaacccg | gcacactcct | tccgaacgtg | tgtagcggcc | 240 |
| aacttgaact | tctccttggc | aagttttgcc | tttcctaact | cgcttttgag | agcttggact | 300 |
| tcttcgtçct | cttccggtgc | ttcaaaactc | tcttcgctga | cgacttttaa | cttggcgagc | 360 |
| caatctaaac | ctcgtatatg | gactttc | | | | 387 |
| <210> | 5896 | | | | | |
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| <211> | 431 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine ma | x | | | | |
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| gctttctcgg | ggccattttc | tgcgaaggca | aacatttgga | aagttagttt | taccaagaaa | 60 |
| tgctactctt | aaaacaaaaa | tggcatacaa | cctcctccaa | taaacacaaa | catcaatgta | 120 |
| aatttagagc | aaactcatgc | acatacttcc | ttatgaacat | tcactcgcac | aagatattct | 180 |
| tctacccaaa | aaaatgcacc | catgcgcaat | caaggaacct | tcgttaccta | gattatttat | 240 |
| atgtacttcc | aaggtgtatt | tgctacctac | atcacatgca | tttccttggc | taaatttaca | 300 |
| tacatgcata | ctcaaagcat | cttggctacc | aaaaattgca | cacgtgcaca | ttctagtatt | 360 |
| tctaatacct | atgcatatac | aaactttgtg | atgaatcttg | gctatctaca | caataaagtg | 420 |
| ctacatttca | t | | | | | 431 |
| <210> | 5897 | | | | | |
| <211> | 321 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine max | - | | | | |
| \Z13> | Grycine max | • | | | | |
| <223> | unsure at a | ll n locati | ons | | | |
| <400> | 5897 | | | | | |
| tcttagtctc | agatgatgca | gctgagnttg | tagctacctc | atgcactcct | ctaatgacta | 60 |
| tggcatcatt | tctggcgcta | aactgctgag | agttggaagc | catcttctca | attaaatttc | 120 |
| tggcttcagc | aggagtcatg | tttccaaggg | ctccaccact | ggcagcatct | atcatacttc | 180 |
| tctccatatt | actgagttct | tcataaaaat | attggagaag | aagctgctcc | gaaatctgat | 240 |
| ggtgagggca | actggcacac | agttttttaa | atcgctccca | gtactcatac | angctctctc | 300 |
| cactgagttg | tctaatacct | g | | • | | 321 |

| <210> <211> <212> <213> | 5898 436 DNA Glycine max | |
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| aactgcttca | a tatgctaatg taactaggaa tgtggtggtt agattcataa aaaatgagat | 120 |
| aatttgcata | a tatgggttgc ccagcaaaat catcgctaac aatgccatca acctaaataa | 180 |
| cacgatgatg | g aaggagttgt gtgaggattt taagattcaa caccataatt cgacacctta | 240 |
| ccaacccaag | g attatcaatg tagttgaggc caccaataag aatatcaaga agatcattca | 300 |
| aaagatgata | gtgatgtaca aggactatca taagatgttg tcgttctcat tgcatggnta | 360 |
| tcaaacttct | gtgtgcactt ttactggggc aaacccaatt tcgttggtgt atgggatgga | 420 |
| agctctccac | cettte | 436 |
| <210> <211> <212> <213> | 5899 457 DNA Glycine max | |
| <223> <400> | unsure at all n locations 5899 | |
| gatgtcagct | ctacttactg cattnntatt ttctgttatt acctgatgca tcttgtttct | 60 |
| acttacacta | agaattgttt tactttgtat tttgaaattg catatagtta tgagtgagga | 120 |
| ctatgtgtgc | cccacactct gtttcctaca ttctagaatt gttagctttg catcattgtg | 180 |
| ttggctatcg | attttatcgt gcaaagagtc gaggccaatc atgagattca gaaggaaacc | 240 |
| atatagaaat | gtaagattta ttttacattt gtatcaatat gcagttatct gtgcaaattn | 300 |
| tggttgcatt | gaaatgaggt tgtgattgcc aattgtatca accacaatta acccatgtca | 360 |
| aatggcaatg | gttgtaacac aactgccacc acaatctata accttggcta tataagagac | 420 |
| ttgtaaatga | catgaaagta tttagtagtg tggagta | 457 |
| <210> | 5900 378 | |

| <212> <213> | DNA Glycine ma | x | | | | |
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| <400> | 5900 | | | | | |
| cgcttggaac | ggacacgagt | atatacgaat | tatagacagc | tttatgtgct | ttctgacctt | 60 |
| tgcgaatatg | acctaccgag | gaatattcca | ccgaggcctt | atagtctata | tctatatttg | 120 |
| taccttttct | ctgaactcac | aatgtgttct | tattcactac | tccattacca | gacataagga | 180 |
| attggaacaa | aacagcacat | gtgcacttta | cttttctgcg | atacgccaag | ccttgacaga | 240 |
| ctatacacat | gaagttatcg | tatgacagag | agtgatattg | atatgaacaa | gactacatgc | 300 |
| ttactaacta | gagacacctg | aacgctcata | ttttatagag | cattctctat | ctagttgcgg | 360 |
| gcgatattac | tttaacat | | | | | 378 |
| <210> <211> <212> <213> | 5901 294 DNA Glycine ma: | x | | | | |
| <400> | 5901 | | | | | |
| gtgcaccaca | gagacataac | aggctctgta | ttagcactaa | aaggatcaat | tcaaaatgct | 60 |
| tacataactt | caaaagtata | tcatattgct | agcccatagt | aggcacatcg | atattccact | 120 |
| tggatcatat | gtatctagga | ctcttcttga | tcactcttgg | tttgaacaac | gatgtgctga | 180 |
| tcaataattc | aaacatcttt | tttgctttcg | tagatcttac | cttgatgtta | tgccccttag | 240 |
| ccaaatcgag | ttctctctaţ | accaagccct | taatttctgc | ctagcatgct | atga | 294 |
| <210> <211> <212> <213> | 5902 214 DNA Glycine max | C | | • | | |
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| ttagaaagaa | tgttcacaca | caagttgctt | gaataatcgt | gacttttggt | aaagtatctt | 120 |
| tcgaaatcac | tcactggtaa | tcgattacca | ttaaagtgtt | atcgattact | cattaacaga | 180 |
| tgtgactctt | cactttgaat | cttgaaaacc | ttaa | | | 214 |

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|-------------------------|-----------------------------------|------------|------------|------------|-----|
| <213> | Glycine max | | • | | |
| <223> <400> | unsure at all n locat. | ions | | | |
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| atggatggaa | aaaagggttc aagcaaactc | tacagtactt | ttgctacagg | aagttagaag | 120 |
| gtgagatttg | gaagagctta tttgaactag | tcaaaatggc | ttatgacatt | cgtataagat | 180 |
| atttttatto | aataaggttc acaactaagc | ttatggataa | gctntcatgt | tatcagttta | 240 |
| ttgaataagt | gcttaattaa gatgttttgt | cagttgagcc | cttaaagact | aattacaggt | 300 |
| cattcacgtg | gagctcacaa actggagggc | tgagttgaat | tgagacagat | gaaataacag | 360 |
| gaaaaatata | tttgttcaat acttaaggaa | acaagtttac | anaggcttat | cagctaaaat | 420 |
| atatgttcaa | gagttaagat gga | · | | | 443 |
| <210> <211> <212> <213> | 5904 442 DNA Glycine max | | | | |
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| agcttattcg | aagccccttg aattgattgt | ctgttcatgc | atcctcaacc | attgagttcg | 60 |
| gagccccatg | aattgattgc ctagcgctgt | tcgtgcatcc | tccatcatca | aatcttattc | 120 |
| ggaacctgat | gagttgattg ccattcatgc | atcctccacc | attgagtccg | gagccttacg | 180 |
| aattgactgc | caagctctgt ttataaatca | tctatcatca | aatcttattc | gaagccccat | 240 |
| gaattgattg | ccattcatgc atcctccacc | attgagtccg | gagcgccccg | aattgactgc | 300 |
| ctagcgctgt | tcgtgcatcc tccagcatct | tattcggagc | cccaggaatt | gattgtcgtt | 360 |
| tatgcatcct | acaccattga gtccagagcc | nncacaattg | attgcctagc | tatattcgtg | 420 |
| catcccacat | catcaaatct ta | | | | 442 |
| <210><211><212> | 5905 464 DNA | | | | |

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| atcatcctac | tangacgact gagaaaactg gggcaaataa agagggtgag gatgagggag | 120 |
| aaacccatgo | tgtgactgcc attcctgtac ggccaagttt cccaccaacc caacaatatc | 180 |
| tttactcago | caataacaaa ctttctcctt acccaccacc cagttatcca caaaggtcat | 240 |
| ccctaaatct | accacaaagt ctgtctacca cacttccaat gacgaacacc acctttagca | 300 |
| caaaccataa | acaccaacca agaagtgaat tttgcagcga gaaagcctgt agaattcacc | 360 |
| ccaattccag | tgtcctatgc tgacttgctc ccatatctac ttgataattc aatggtagcc | 420 |
| ataaccctag | ccaaggttca tcaaccttca tttcttcgag aata | 464 |
| <210> <211> <212> <213> | 5906 445 DNA Glycine max | |
| <400> | 5906 | |
| agcttgcaca | caagattctc cttggctggc acttcaaaac cttctggttg ggtcttatag | 60 |
| atgtcttcct | ctaaatcccc atgcaagaat gcagttttaa catctagctg ctccaagtaa | 120 |
| agattctctg | cagcaacaat actcaaaata actctgatgg tagtcatctt tacaactgga | 180 |
| aaggagtctc | tgtgatatca attccctgtt tctactgaaa ccctttcacc acaagtctcg | 240 |
| ccttgtatct | tcttctaccg tcagattctt cctttagcct acagacccac ctattttgta | 300 |
| acgctttctt | tccttctggc aatttagtta aagaccacgt cttattcttc tgaagggatg | 360 |
| tcatcttatc | tttcatcgct agcttccact caatagtgtc attcccctgc atagcctcac | 420 |
| tgaaacattc | tggctcacca acatc | 445 |
| <223> | 5907 466 DNA Glycine max unsure at all n locations 5907 | |
| gcatggaaga | gttagtcttn ctacttttat ttgntgacca tatagttgta cctggagata | 60 |

| tgtcgcggqq | gtcaggggac | cttqnqqacq | tcaggtgggg | r tactattacc | caaaaccaag | 120 |
|-------------------------------------|---|------------------|------------|--------------|------------|-----|
| | | | | | | 120 |
| cttgaccaat | cctgacccaa | cccgggcata | gtcagttagt | gagaacctat | gacgtaccta | 180 |
| agcaggcgag | ctcttggcag | tccaccaata | aaagaacaaa | gtccacgaag | caaggaggct | 240 |
| tgtgtggcgg | ctgaccagct | atgtatcttg | ggtggtttct | gaaaattacc | ctctggtaat | 300 |
| cgattaccat | tcgtgggtaa | tcgattacaa | ggtttaaaaa | tggagacagg | atgttaagta | 360 |
| gcttctggta | atcgattacc | aattgtgtgt | aatcgaatac | acagtatgat | agagcactgg | 420 |
| taatcgatac | cagttgtgtg | tatcganaca | cagtgtacct | gtacta | | 466 |
| <210> <211> <212> <213> <223> <400> | 5908 354 DNA Glycine ma unsure at | x all n locat | ions | | | |
| agcttgtccg | cataggttct | tcgatctatc | caggcctgtt | tatatgcact | ttttaggcat | 60 |
| | | | | gttacgtata | | 120 |
| tttgaattca | gcttattccg | cttttttt | ttataacgcg | gattttaaac | atctagttat | 180 |
| atctgacata | aataagagat | ttttacacţg | tttatgtaat | aatataattt | gtactacaca | 240 |
| gagtctatat | atcaatggaa | cacatttaaa | ggctcatatt | ttggttagta | tgttactttt | 300 |
| ttggtagaaa | aacgaaaatc | acctganatc | aacactaatt | atactgatat | ttta | 354 |
| <210> <211> <212> <213> | 5909 449 DNA Glycine max | ζ | | | | |
| <223> <400> | unsure at a 5909 | all n locati | ions | | | |
| tatacacttt | atatgtaagc | cctcattgta | ttcaacatat | tattgatatg | gaaatgatat | 60 |
| gattttgcta | ctgtaaaaaa | aaataagcac | taatattaat | tttgactaca | tcttcaaaaa | 120 |
| ccaaattatg | gttgttttta | taaatgaaga | aactaagact | aattttaatc | aattcttcga | 180 |
| jaaccaaaaa | ttcattttac | catcataata | ataattactt | atacacttgt | cgttttttt | 240 |
| cttttcatgt | tagacccata | aacatatttt | ttatatatta | atcacatoca | tasttastts | 200 |

| tataagtaat | tttactctaa | ı ttaaaaataa | ataaattcto | tgtagatatt | taacataatt | 360 |
|-------------------------|-----------------------------------|--------------|------------|--------------|------------|-----|
| gtatacatco | aagactcaaa | ıttcaagatga | ttgggtntac | : tcacataata | ataataataa | 420 |
| gaagaatagt | gataataata | atattgata | | | | 449 |
| <210> <211> <212> <213> | 5910 403 DNA Glycine ma | × | | | | |
| <223> <400> | unsure at 5910 | all n locat | ions | | | |
| agctgtgacc | attngactta | tatgctccat | cttgaggggg | aatgttggaa | ttacacacat | 60 |
| tgtatgggta | cttgttccac | acattgcatg | ggtacttgtt | ccaataaaga | atagttttt | 120 |
| tttatcagta | aaactaaata | tattatatat | ataaatgatc | aaaagtacca | gaggtactag | 180 |
| tacataggga | tatacatcct | catatctaga | caccaaaact | gaggtattct | agatattagg | 240 |
| agaacatgtg | ttttgttcta | attgtaacac | ccattacata | agaaaacctt | ggctaatatt | 300 |
| gcttgaccat | tggtttagat | gggttgagaa | atgtttctca | naatgtctaa | gccaagtcca | 360 |
| ggtcaagaaa | acagcttcat | caaacaatct | gttagcatca | aat | | 403 |
| <210> <211> <212> <213> | 5911 406 DNA Glycine max | ĸ | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| tccagatata | gcatacatag | ttagggtatt | atgcagatat | ttaagcaatc | caagaatgga | 60 |
| tcattggaaa | gaaaccaaaa | gagttatgag | gtatttgaag | agaacaaagt | attatatgct | 120 |
| cacatacaaa | aggtcaggtc | agttggagat | cactgggtat | tctgacttag | attntgcaga | 180 |
| atacctagat | agtttgagat | ccacttcagg | ttacattttc | atgttagtcg | gtggtgcggt | 240 |
| ttcttggcgc | agtgccaggc | aaacccttac | tacttcatcc | actatggcga | caaaatatgt | 300 |
| ggcatgctat | gaggcatcaa | atcatggaat | atgattgaga | aattttgtca | caggttntca | 360 |
| aattgtggaa | tgaattgaaa | gaccacttaa | gttatattgc | gacaat | | 406 |

| <210> <211> <212> <213> | 5912 407 DNA Glycine max | |
|----------------------------------|--|-----|
| <223> <400> | unsure at all n locations 5912 | |
| agcttaactn | tggagcttac tgaaacaagt taaaacgagt ttatttgtat aaggttcttc | 60 |
| atgaatatta | ttttaataag ctaaagaaaa cttccaataa ctaagaaggt cactagtcat | 120 |
| ttacataaat | ccatataagc tcttcatgaa tattatttta ataagctaaa gaaaacttac | 180 |
| aataactaag | aaggtcacta gtcatttcca taaatccata taagctcgta caaatgctcc | 240 |
| cttgaagata | aatttgagga acttgcctgt ttcttctttt gtgtgattat agtctttatc | 300 |
| tttgaacttt | tgtctgaact atataggtta tctgcaactc atatatgata tggaacccta | 360 |
| tttcagaaaa | ggatgagaga ctctgcacct accgggcacg aacttga | 407 |
| <210> <211> <212> <213> | 5913 436 DNA Glycine max | |
| <223> <400> | unsure at all n locations 5913 | |
| tatacattca | atggcatgga tagccatgct aaggagctta tagagcttct tccaatagtg | 60 |
| aataggtctt | cattgaaaag ggataagcct aacttctgat aaaaaaatct actaatatgt | 120 |
| ttgcttccaa | ttttttggtt gtcaataata tgtttatttg tgcatgcttg tagttaccta | 180 |
| ctactttgga | gcaggttgtt tctaaaaaag ttcatctttt agaagggaat aaatattagc | 240 |
| aacacattat | ttttaatata tatatata tatatata tatatata tagagagag | 300 |
| gagagagaga | gagagaagag atcanattga attgatgtaa ctttgataac ttgtacacca | 360 |
| ttctataact | tcaatngaat aatgttntct taaaactcat ttgtggatag aaagttcctt | 420 |
| tcacatagat | aacata | 436 |
| <213> | 5914 408 DNA Glycine max unsure at all n locations | |

| | <400> | 5914 | | | | | |
|---|----------------------------------|-----------------------------------|-------------------|-----------------|--------------|--------------|-----|
| | agctttnggg | r ctgganaact | atataacaac | accaaggttc | : tagtttaggd | ccctctctct | 60 |
| | ctctctctct | cttctctcct | ctctctcctc | tttcgnttgg | agtttgaggo | ttctcttctt | 120 |
| | cttttagaca | . ctttttcgtt | ttgcaattcc | agttgttact | tttcatttta | gcaataaaat | 180 |
| | ttcgttctct | attgattaat | ggaaggctaa | gtctccagcg | ttgttttctc | : ttgaggatca | 240 |
| | agcacagtto | tctttgagtt | tctattatta | ctattaaatt | ttgttcactt | tttcctcttc | 300 |
| | actaattact | ctaaaattgo | : tgctattaat | tcatgcatgc | ttagtgcttg | attaattgtc | 360 |
| | tctgcgctta | atttacatto | : atgcttaatg | atcgntcatg | attaattg | , | 408 |
| | <210> <211> <212> <213> | 5915 399 DNA Glycine ma | x all n locat. | ions | | | |
| | <400> | 5915 | | | | | |
| | tagataccac | cagcatcaag | gaattagggc | ggttgatgga | acctctccaa | atgcaagctt | 60 |
| | tccgcaagac | ttacggaaag | atcttagaat | tgaccttagc | agaggtatcc | atagaagcca | 120 |
| | ttgcatcact | cacccaatac | tacgaccagc | ctttgagatg | cttcacattc | agagacttcc | 180 |
| | aattagtacc | aaccattgaa | gaatttgagg | aaattctagg | atgtcctctc | gggggaagaa | 240 |
| • | aaccatatct | ttcatccggg | tgtctcccct | ctntgagcag | aattgcaact | gtggtcaagg | 300 |
| • | attcagcaag | aggtttggac | agcataaaac | agactcggaa | cgacatggcg | ggcataccac | 360 |
| 9 | ggaggtacct | agaagacaag | gcgagaggta | tggccgatc | | | 399 |
| • | <210> <211> <212> <213> | 5916 383 DNA Glycine max | ĸ | | | | |
| | <400> | 5916 | | | | | |
| ć | agcttgttgg | tgagagcaat | gtcaagaatg | tcaccaactt | cagccctaat | agttgggcct | 60 |
| ç | gaaactgac | cgttgattcc | catcagaacg | tgttccaagc | aatctggttt | tctgatcatg | 120 |
| t | actccacat | caaacttgta | gggtctcact | attcctccga | ttgacaattc | taccaaaccc | 180 |
| a | accatatta | tgcacccaac | aaaaagagct | ttcaagctca · | ttcttaatta | attttgatca | 240 |
| | | | | | | | |

| gagaaagcct | aattagcaat | ataacaggaa | ggtatcaagt | agtaaaacga | agctattgat | 300 |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| gaacaaattg | aaagaatatg | tatagaggat | cgaggatttg | gattggtggt | accattgcct | 360 |
| tatatatata | agagagagag | aga | | | | 383 |
| <210> <211> <212> <213> | 5917 416 DNA Glycine max | ĸ | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| ctttcttctt | ggttatgatt | gttggattct | tgttatggca | gctattggaa | ttatggcagg | 60 |
| taggttatct | tggatgtgtt | tgacattctc | atcttatgtt | ccttttgtaa | ccatatcgct | 120 |
| tgaatgtctc | tcatcattag | cctgcagatg | atatagagga | ggtaccagat | ttcactcttc | 180 |
| catgcagctg | tgatgaagag | atgttggaga | aaaattcagt | gaaatgagta | atgtgataaa | 240 |
| ttattntggt | gaaccaaagg | agtttttgtt | ttgcagaata | tcaaaagaat | acaagtgctg | 300 |
| ttaacactaa | cccaagttcc | cagatcttga | aatggagata | atcatcaatc | tgttgcataa | 360 |
| atatgtgcta | atntagtgta | aatattngtg | tcaacattac | tttgttgagt | ttttta | 416 |
| <210> <211> <212> <213> | 5918 293 DNA Glycine max | | | | | |
| <400> | 5918 | | | | | |
| agcttgtaat | gaatatgaac | atattcttat | gatcacttat | ttctgggcag | atttcactca | 60 |
| ttgctcaatc | caactccttg | cggcttgtat | ttccaaccct | gattactgcc | ttgtgcaagg | 120 |
| cccgaggagt | cacctcagat | tctcttacct | tcgagtcact | cageetagee | attaatttgg | 180 |
| cctatattaa | gaagaattgt | tggaacctgt | atgacccttc | tgtcactttt | ccaaggaccc | 240 |
| aaaaatccag | agctagaaaa | tctgaagacc | catctctctc | tgtcccccta | ctt | 293 |
| <210> <211> <212> <213> | 5919 366 DNA Glycine max | | | | | |

| <400> | 5919 | | | | | |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| tggacttctt | catcctgttt | cggagctttg | aagttctctt | cattgataat | atttaacttg | 60 |
| gagagccaat | ctaaacctcg | aggacgaact | ttcggccatt | catgataacc | accaatgatg | 120 |
| ccattacgaa | tgcccctaag | atctttatct | attctccgtt | ggatggccca | agagaggga | 180 |
| ttaagatgga | acccacgcat | gatgcatatg | cgaaaggtac | aatacaggga | tgtacatagt | 240 |
| acgacaatat | tcacacacaa | atataagcaa | aagggtacat | gacactttta | tgcatggcac | 300 |
| gggaaaaatg | gcatgcatcg | tgtatgctcc | gtgcccctta | tttaagggac | ctatatggga | 360 |
| gagagc | | | | | | 366 |
| <210> <211> <212> <213> | 5920 374 DNA Glycine max | | | | | |
| <223> <400> | unsure at a 5920 | all n locat: | ions | | | |
| agcttaataa | aagaacgcan | agcataaact | gaatcaacac | gcacaggaag | ttcagaatcc | 60 |
| tgcattctgg | atacaacaca | ctgcaaagcc | ctccggaagt | tgttctggtc | tgagaagtta | 120 |
| atatgggcat | attgtcctgc | aacccatgct | gcctgttttt | cacaggaaaa | ttaaagtgta | 180 |
| gtctaaataa | taattccatc | gcatggttat | attgtatttt | agaaggagac | tggaataata | 240 |
| ataaaaaaat | tgcagcatgc | agatctttga | tctctctggt | tttctccctc | tctatcctcc | 300 |
| ctgttatgtt | cttccctctt | tttactttct | gtctatcagt | tctctctt | cccacctana | 360 |
| tcctatatca | catg | | | | | 374 |
| <210> <211> <212> <213> | 5921 449 DNA Glycine max | | | | | |
| <223> <400> | unsure at a 5921 | ll n locati | ons | | | |
| tgcagatgct | ctanggagaa | ttgctgataa | attgtagagc | atggaggatc | cgaatagaat | 60 |
| agtgtacata | acaatttgga | gtcaacaata | gtgattccca | taatttatct | caggatagtt | 120 |
| cttagaagat | gaacatcata | ctagttaccc | ++++++++ | aatottotot | stantttt. | 100 |

| ccacttttt | gtggtttact | actgcactaa | ggcattttat | acacaaattt | ggaggttact | 240 |
|----------------------------------|-----------------------------------|-------------------|------------|------------|------------|-----|
| gcattttatt | tattttcttc | tttcagtgag | gttatatgaa | tettteeteg | gtcaataata | 300 |
| gcggttgtac | agataaagtt | actattacta | attaaggtac | atttttatta | gaggtatctc | 360 |
| tttgcgggct | catgcaatna | tttgcttctc | ttgtataagt | catctctcca | cacatatata | 420 |
| atatttttg | ttgagttaac | cttactatt | | | | 449 |
| <210> <211> <212> <213> | 5922 345 DNA Glycine ma: | x all n locat. | | | | |
| <400> | 5922 | all ii locat. | IONS | | | |
| agcttgcttc | ttttggtgca | tagaatgcat | gcaaaaaaaa | aatagtaagt | gtcatgaatc | 60 |
| tctgacataa | gcttcaacca | attaacattg | tttgtatgac | aactgttgta | gttggacagc | 120 |
| aatcacacag | tttgtccacc | atggtatgct | ttatgttcct | attggttata | gttttagtat | 180 |
| gctttatgtt | cctattggtt | atagctttgg | tgctggaatg | ttcaatttgg | agtccacaaa | 240 |
| aggaggaact | ccatatggtg | ttggagttnt | tgctggagat | ggtacaagac | aagcaagtga | 300 |
| aatggagctg | gagcttgcac | agtatcatgg | caagtatata | tgaaa | | 345 |
| <210> <211> <212> <213> | 5923 440 DNA Glycine max | ς | | | | |
| <223> <400> | unsure at a | all n locati | lons | | | |
| cagcttgtag | ggggctgana | gatatgtaaa | atgctaaaac | taaactttnt | agttggatct | 60 |
| atacaattca | cccaacggtt | gtaaagagtc | cagggggctg | aaagacgatg | attatataat | 120 |
| gcagaatttt | gagaatattg | ttgtatgatt | gtgctaatcc | taattgtatt | gagaatattg | 180 |
| ctacatgatt | ttgctgatct | taattgattc | tatttgtgtt | aattctgatt | gtatgtatta | 240 |
| attcttattg | tattttaatt | ctattttgta | tcttgatctc | ttgattattg | ggatcactta | 300 |
| ttttaggat | agatagttgt | atcatatatg | tcaggaaaag | ctataggaga | aatcttagtt | 360 |

aggtgggtgg atgacettgt atatatet ategattgtt tetaataeag geagaacaae 420

| acattctatt | tattgtattc | 440 |
|--|---|--|
| <210> <211> <212> <213> | 5924 351 DNA Glycine max | |
| <400> | 5924 | |
| agcttggaga | ggatgcttca atggaggaat ttatagaggg atagaaagag agagggggag | 60 |
| catgaaattg | aatgaagaaa aagggagaga agttgaactt tgagttgtgt ctcacaagac | 120 |
| tctcattcat | caaagttaca acaagtgttg cacatgcttc tatttataga ctaggtagct | 180 |
| tccttgagaa | gctttcttaa gaaaacttcc ttgagaagct tctttgagaa aacttccttg | 240 |
| agaagctaga | gcttatgtac acacacccct ctcataacta agttcacctc cttgagaagt | 300 |
| ttccctaaga | agattettat agaagttaga geetaaetae teataeetet e | 351 |
| <210> <211> <212> <213> | 5925 449 DNA Glycine max | |
| | | |
| <223> <400> | unsure at all n locations 5925 | |
| <400> | | 60 |
| <400> | 5925 | 60 |
| <400> tgtaagatta aacaagtntt | 5925 tggggtaccc atcacatgtg gtactaagtg tgagtcaggc gattgtgcac | |
| <400> tgtaagatta aacaagtntt aacttagctc | tggggtaccc atcacatgtg gtactaagtg tgagtcaggc gattgtgcac ccacatacac aatgcgcgca taaacccacc atccctgtt gcccacctac | 120 |
| <400> tgtaagatta aacaagtntt aacttagctc atcaatactg | tggggtaccc atcacatgtg gtactaagtg tgagtcaggc gattgtgcac ccacatacac aatgcgcgca taaacccacc atcccctgtt gcccacctac acgtactccc acgtagccca tatcctcgtt actctcaaca gcgggtcccc | 120 180 |
| <400> tgtaagatta aacaagtntt aacttagctc atcaatactg tcgcagccaa | tggggtaccc atcacatgtg gtactaagtg tgagtcaggc gattgtgcac ccacatacac aatgcgcgca taaacccacc atccctgtt gcccacctac acgtactccc acgtagccca tatcctcgtt actctcaaca gcgggtcccc ccaagctttc acagcatcca agcagaacag cattcaaaca gcacaagcta | 120 180 240 |
| <400> tgtaagatta aacaagtntt aacttagctc atcaatactg tcgcagccaa acagtttttc | tggggtaccc atcacatgtg gtactaagtg tgagtcaggc gattgtgcac ccacatacac aatgcgcgca taaacccacc atcccctgtt gcccacctac acgtactccc acgtagccca tatcctcgtt actctcaaca gcgggtcccc ccaagctttc acagcatcca agcagaacag cattcaaaca gcacaagcta gcgaaacaga gcatacgcag aaaactctgc tcaacagatc aaccataatc | 120 180 240 300 |
| <400> tgtaagatta aacaagtntt aacttagctc atcaatactg tcgcagccaa acagtttttc ggatcgacga | tggggtaccc atcacatgtg gtactaagtg tgagtcaggc gattgtgcac ccacatacac aatgcgcgca taaacccacc atccctgtt gcccacctac acgtactccc acgtagccca tatcctcgtt actctcaaca gcgggtcccc ccaagctttc acagcatcca agcagaacag cattcaaaca gcacaagcta gcgaaacaga gcatacgcag aaaactctgc tcaacagatc aaccataatc tcacttaaag accacagtag caattgcttc gatccaattc gttaaccgct | 120 180 240 300 360 |
| <400> tgtaagatta aacaagtntt aacttagctc atcaatactg tcgcagccaa acagtttttc ggatcgacga | tggggtaccc atcacatgtg gtactaagtg tgagtcaggc gattgtgcac ccacatacac aatgcgcgca taaacccacc atccctgtt gcccacctac acgtactccc acgtagccca tatcctcgtt actctcaaca gcgggtcccc ccaagctttc acagcatcca agcagaacag cattcaaaca gcacaagcta gcgaaacaga gcatacgcag aaaactctgc tcaacagatc aaccataatc tcacttaaag accacagtag caattgcttc gatccaattc gttaaccgct caaaattata ctggaagtct atagtgcata aggctacatt gtgaccgttg | 120 180 240 300 360 420 |

| agcttagaaa | a tagaaagtac | ttttcagttt | tccaatgagt | tgaaaagaca | tttttgccga | 60 |
|-------------------------------|-----------------------------------|--------------|--------------|------------|------------|-----|
| gttgttacgo | c aattctattc | attttttgtg | r tgtttaaagc | acttaacact | tgatgacatg | 120 |
| gtatagcaga | a cttggtcact | : tggattaatg | cgttaatgag | tacaatttt | gggaaattta | 180 |
| gcatacgcct | attgttgagt | gtagtatgat | gcaatctgga | tttcttagta | acacttggct | 240 |
| actcaggcct | ttgtatgaca | atgaaagata | agaaccttag | tagttaatgg | ctggtcttgt | 300 |
| gcgttctgat | ttgcaattta | tgcccgatca | gtgatccttc | acatcacaaa | atgtggcttc | 360 |
| tatttcctca | ı tattaccctt | gttcatact | | | | 389 |
| <210> <211> <212> <213> <400> | 5927 424 DNA Glycine ma | x | | | | |
| gctcgaagac | aagactatac | gaggtatctt | ccttgggtat | aacaatatct | ctaagggcta | 60 |
| ccgtgtctac | aacttgcaaa | ctaagaaact | cgtcatcagt | cgagatgttg | aagttgatga | 120 |
| gtatgcttct | tggaattggg | atgaagaaaa | agtgaagaag | aacgttctta | tacccgctca | 180 |
| actacctcaa | gaagaagctg | aggaagaaga | cccaggtgaa | ccaccttcac | ctgcaccata | 240 |
| acaacaagat | caaaaactat | catcaccaga | gtctactcca | agactagtaa | gatctttggt | 300 |
| ggacatatat | gagatcagta | acttggccat | acttgaactt | ggaagctttg | aagaagcgtc | 360 |
| gaagcatgaa | gtatgggtca | cggcaatgga | agaagagata | cagatgatcg | atacaacaac | 420 |
| acat | | | | | | 424 |
| <210> <211> <212> <213> | 5928 448 DNA Glycine max | ĸ | | | | |
| <223> <400> | unsure at a | all n locati | lons | | | |
| agctntgcca | aaatagctta | catcagctnt | gaaaaatcaa | tttttgaaga | ggataagtca | 60 |
| taagtgactg | gctaatcagc | ttcacagata | tacatgtata | tataacaagt | agtaacaatg | 120 |
| tgctttacct | ggactttata | taatgaaaca | acttccacaa | caacaccaat | ggacaaacca | 180 |

| agttcaact | a caacaaacta | attcagcttc | acctggagtt | gatataatga | gtaatggctt | 240 |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| tagaagaac | t caaagccaaa | ccaagttcaa | gtacaacaaa | ttaattaatc | tttttctcaa | 300 |
| ccaaagtat | g tcaaactact | tgttggatat | taaaagtgtt | agttattcat | gtgacaggca | 360 |
| aagagagtt | g taagacaata | attcttggtt | aaaactgtca | atgaagtatt | gcggcattaa | 420 |
| tttgatacaa | a actgatcaag | aacaatga | | | | 448 |
| <210> <211> <212> <213> | 5929 428 DNA Glycine max | × | | | | |
| <223> <400> | unsure at a 5929 | all n locat: | ions | | | |
| gttgcgcgta | ctgatgggta | ccatgaggtg | tttgctgggt | tttgacccac | gcgggtgttg | 60 |
| aagagacggc | atgggcatct | ccctccttcc | tttntgccca | tgttgccccg | attcttttgg | 120 |
| cattcgcgtt | tgtggaggaa | acataatcaa | actttcctct | tttcaatcct | acctcgattc | 180 |
| tttcctcgac | aaacaccaga | tccgcaaagc | tggacggcat | gtaacctact | agcttctcat | 240 |
| agtagaacac | tggcagagtg | tctaccatca | tggtgatcat | ctctctctca | accatgggag | 300 |
| gagccacttg | tgccgccaaa | tccctccatc | gctgcgcata | ttctttaaag | gtttcaccct | 360 |
| ctttcttgaa | catattctgc | agttgagtac | ggtcaggagc | catatcagaa | ttgtactgat | 420 |
| actgcctt | | | | | | 428 |
| <210> <211> <212> <213> | 5930 392 DNA Glycine max | | | | | |
| <223> <400> | unsure at a 5930 | ll n locati | ons. | | | |
| agctttctag | cttttcattg | gtgtattttg | atctcctttn | tgtgctctaa | attgtgggag | 60 |
| tgtgctcaaa | tatatggggc | aattttgatt | tgttttcttg | cttgattaag | ttgaattggg | 120 |
| ggtttgtatg | agatggccct | aggcctataa | tgcattttga | aacaatagga | catgccacat | 180 |
| tgtccccgtt | ctcttgctat | tgatgcctaa | acgcgcgccc | accaagtgtt | cggtgaaatg | 240 |
| cctcaatggc | attagcgtgt | gacttttgta | aggagacaac | ccatggggta | ttttggtttg | 300 |

| tgcatattt | ctatttttt | ggaatatgta | ttcattcccg | aaaaaggcta | gagtaattgc | 360 |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| cccacatata | . tcctagtcct | agaaactgaa | at | | | 392 |
| <210><211><211><212><213> | 5931 475 DNA Glycine ma | x | | | | |
| <223> <400> | unsure at 5931 | all n locat | ions | | | |
| tgttggacac | gcggagatta | cgtcatcttc | cacgctcaca | ttatctgtca | tactcaaatt | 60 |
| tgagtcacgc | tgacgggcgg | aaatacccga | gtggttatcc | gtataaacat | tcttttttgt | 120 |
| tgtctgtaag | acgaanagcc | tgatagcaag | cagagactaa | cgtcgttttc | tgcgcccttc | 180 |
| gtcaatcgcg | gccgacaagt | cccgttgaca | cgcggagatt | tacgtcatct | tccgcgcaca | 240 |
| caagatctgt | catactgaca | tttgagtcac | gttgacgggc | ggaaataccc | aagtggttat | 300 |
| ccgtataaac | tttcttttt | gctgtctgta | agacgaanag | cctgatagca | cgcagagact | 360 |
| aacgtcgtct | tctgtgccct | tcgacaatcg | cggccgacaa | gcccattgac | acgcggagat | 420 |
| tacgtcaact | teegegetea | caagatttgc | atactgacat | tngagtcacg | ttgac | 475 |
| <210> <211> <212> <213> | 5932 308 DNA Glycine max | ς | | | | |
| <223> <400> | unsure at a | all n locati | lons | | | |
| agcttgctag | tcatcttttt | aactcttgct | cttanagcag | gttatatggt | ttgactagcc | 60 |
| aagggataga | caatttgatc | aaaggactca | gatgttttcc | atccgacgga | tcggagtttg | 120 |
| agtatttttg | tgagttgatg | ataataattg | ggagttgaac | tagattagcg | acctttgttt | 180 |
| gcatgaggag | gtggtttagt | gaaatcaatc | tcaactcttt | tatccttaga | tatactactt | 240 |
| ctttatatcg | cactccatgt | gttcgtaaaa | ctgccaanaa | tagctggtta | attatactcg | 300 |
| tggtattt | | | | | ` . | 308 |
| <210> <211> <212> | 5933 411 DNA | | | , | | |

| <213> | Glycine max | |
|-------------------------------------|---|-----|
| <223> <400> | unsure at all n locations 5933 | |
| tgaagaaggc | tgagcaaacg ggtaggcata taaaaggaag cacgagaact gcatataaaa | 60 |
| ggaagaaagc | gctcctcgtg atggcgcgtt gaacctgcaa acgcaagtcg taggctccaa | 120 |
| tggcatttcc | ctgcttcctg cagctgcagc agtctgctgc agcactgtgc accctgtcac | 180 |
| ctgcatagct | aaaacgccag tttgactggc gtttctggcc tccatgcaca acgcgccagt | 240 |
| ggatgttgca | cgtcccactc cacgtaagta gaaggcgaag ccgctgctgc tactagcacg | 300 |
| tccctctcca | cgtggcagct ccttcacgga agcgccagtg gtggtggcgc catgcatggc | 360 |
| gttcacgtac | caaaagagca cncgctgaga ataaagtttg gaagaacccc a | 411 |
| <210> <211> <212> <213> <223> <400> | 5934 325 DNA Glycine max unsure at all n locations 5934 | |
| | cctttntata aaaagagaag ttctgaaact catcacgttg tctaaaaagg | 60 |
| ccttgaggtg | gatctaagta ctctgatcat tcattagcat attcatgatt tggtggcatg | 120 |
| ctcaccaata | tttgtttctt tagggaactc accataacta aaaaaacgca aaggcacccc | 180 |
| tataacaccc | gatccaaaag taagatggat aacgaagagg gagtgcaaga acagatgaag | 240 |
| gctaacatat | cggccttaaa agatcagatg gcttctatca cggaagccat gctannaaat | 300 |
| caaaaatcaa | taaaagacaa tgata | 325 |
| <210> <211> <212> <213> | 5935 439 DNA Glycine max | |
| <223> <400> | unsure at all n locations 5935 | |
| tcaatagcat | agcctcgtaa gaggacatcc aaagntgtca tattgagatg attctctctg | 60 |
| tgaagtttgt | cagaaaggga aacaagtaaa aagttctttt aaagaaaata aatgttattt | 120 |
| | gccattaaag cttctacacc ttgacttgct tgaaccaacc aggattgcat | 180 |

| ccctttttgg | atgcaaatat | ggtctggtca | taatggaata | ttacactaga | tggacttggg | 240 |
|----------------------------------|--|-------------|------------|------------|------------|-----|
| ttaggttcct | aacccacaag | aatgagtcct | ttgatacctt | ntataaatnt | tgtaaaaaga | 300 |
| ttcaaaataa | aaaaggcatt | ngtatctctn | taatcataag | tgatcacagg | gaagagtttg | 360 |
| aaaatgatat | ntttgaatga | aaagaatggt | attcaccata | tattttccac | tganagaata | 420 |
| ccaaactaga | atggagtta | | | | | 439 |
| <210> <211> <212> <213> <223> | 5936 331 DNA Glycine max unsure at a | | ions | | | |
| <400> | 5936 | | | | | |
| | | | | tctcagttac | | 60 |
| cgctcaatac | catcaaaatc | agcatgttca | atagccaata | ttcccgcatc | agctaagagc | 120 |
| tcctctggaa | aattgcaaat | caactgtctg | ttaacaaaac | agctgatacc | atgacctatt | 180 |
| atcttctgca | ccttttctct | cattatctct | ttctctgctg | tttcaatttg | agcaactcta | 240 |
| gccatagaat | caacacgaac | acgtgcacca | tatatcttca | ctttgtctgt | gtccatggca | 300 |
| atgtttgcca | ccagtatctt | tgcattctct | a | | | 331 |
| <210> <211> <212> <213> | 5937 338 DNA Glycine max | | | | | |
| <223> <400> | unsure at a 5937 | ll n locati | lons | | | |
| agctntgagc | aaattcaaac | gacattaact | ttttactcgg | atgtctgatt | cagtcccgta | 60 |
| atatatcgag | acgcttgaat | ttgaatgccg | aagctctgag | caaattcaaa | cgacaataac | 120 |
| tttttagtcg | gatgtctgat | cgagctccgt | actatatcga | gacgctcgaa | atggaatacc | 180 |
| gaagctctga | gcaaattcaa | acgacaataa | ccttttactc | ggatgtctga | ttgagacccg | 240 |
| taatatatcg | agacgctcga | aatggaattc | tgaagctctg | agcaaattca | aacgacaata | 300 |
| acatttacct | cagatgtttg | attgagctct | gaatatat | | | 338 |

| <210> <211> <212> <213> | 5938 417 DNA Glycine max | |
|----------------------------------|--|-----|
| <223> <400> | unsure at all n locations 5938 | |
| tgcatttgga | a attgcgaaag ccccactcca tcattaggat tattacctga catctcanac | 60 |
| aaacaaatca | a aacgtaacaa gacaattata gctgctgttt gaatacctca cccactcaag | 120 |
| tgtatcacad | c aattatggct cttctctaat gaaacactct tgccttttac cactctaatt | 180 |
| ccccttgagt | tcttaggcaa ttcaagagat tatggccaca acaaagaaca attcaccaat | 240 |
| atgtgtaagg | g taaggctaga gagacaagga aaaggttaac caagaaaagg ctaacaatgt | 300 |
| ttttaggcac | c acatgaagga aataaaattc agaattaaga attcaagaac aatccttcat | 360 |
| caaccaatat | attaccttaa agagattett ttaaagtett caacatgace atteage | 417 |
| <210> <211> <212> <213> | 5939 441 DNA Glycine max | |
| <223> <400> | unsure at all n locations 5939 | |
| agctcttgcg | tgcaaactta tcgttcacgt tcctctcatt ggaattgaat gaaaccccac | 60 |
| acattaacaa | agtcactttc aaaaagacac tttcgttgtc ccccctcac ttttttcca | 120 |
| tacatgaaga | aaatgaacgg tttataatag attgggcatg gaagttgaca ggtgaaatcc | 180 |
| caaaccccaa | ttctcactat acceptitni ttttctttta ttctccaaac attacacaag | 240 |
| gagttactac | caaattatta ttttcagtac tgagagttgg agggtctatt ttctgtccat | 300 |
| taatacctgt | ctcatangcc ataccacttc catattttgc aacattntct cctcacttgt | 360 |
| tgcataacac | caaagaacta catatagttg tcattgcaca ggtacaacaa cctaactagc | 420 |
| tagctagcta | gacacacacc c | 441 |
| <210> <211> <212> <213> | 5940 432 DNA Glycine max | |
| <223> | unsure at all n locations | |

| <400> | 5940 | | | | | |
|----------------------------------|-----------------------------------|--------------|------------|--------------|------------|-----|
| ctgtgtatca | ttatgggttt | agagggccac | aaaaagccac | : caatgaagga | agaaatagat | 60 |
| actttgattc | gaagcatatt | tatttattga | agataatccg | gacaaaacct | ttgcactttt | 120 |
| cctcaccttt | ttaaattaat | tactattaga | attactattt | tttattatct | aatattatac | 180 |
| gagattacga | gcttataatt | actattggct | caaactattg | tcaagttatt | ttttaatcc | 240 |
| açatttgata | ttatcttata | tatatggntc | aactcttaaa | aaanaaattg | tgtgtactca | 300 |
| actcttgcat | atagagattt | agtatttcac | agggaacaan | aattctatat | taatatagaa | 360 |
| atatataaca | gaaataaaat | atccaaatgt | ataaagtagc | aatttaatca | aatattatca | 420 |
| tttcacaaag | at | | • | | | 432 |
| <210> <211> <212> <213> | 5941 285 DNA Glycine ma | x | | | | |
| <223> <400> | unsure at 6 | all n locat | ions | | | |
| agctntagct | ttgtccccaa | ggcttcatgt | atactggtcc | aaaatcgcga | agtgaacctc | 60 |
| ggatccctgt | cagatacaat | actagaagga | attccatgca | accttattac | ttccttgatg | 120 |
| tacaactcca | ctagcttctc | cattctatac | ttcatattca | ctgggataaa | atgagcagat | 180 |
| ttggtgagtc | gatctactat | aacccacaca | gcatcatgtc | cacgactagt | cttgggttaa | 240 |
| ctagatacaa | aatccataga | tatgctctcc | catttccatt | ctgga | | 285 |
| <210> <211> <212> <213> | 5942 397 DNA Glycine max | ς | | | | |
| <223> <400> | unsure at a | all n locati | ons | | | |
| agcttcttat | ccaaggctca | tcttggtggt | gaagctcctt | cttccatggc | ttattcccta | 60 |
| gtggatggcg | cctcctctca | cctcttctcc | tttgttttcc | gctgcatctc | catggtgtaa | 120 |
| aatcaccatt | aaaggacctc | attgaagctc | aaagatctag | cctccatgga | agctccagaa | 180 |
| gcaagcttcc | atcaagtggt | aatcagagca | caagagette | aagtaggtgc | tccttaaacc | 240 |

| tccattaatt | nttttgcttt | accttttctt | ccattgttgt | ttcttcattt | ttttcttcat | 300 |
|-------------------------|-----------------------------------|---------------------------------------|------------|------------|------------|-----|
| gcatctcctc | acatgtcttg | tgccaaattt | tgttaacatg | attctctaga | gtttcccacc | 360 |
| gataaacttg | ctatagaagc | tagaattgat | tttctat | | | 397 |
| <210> <211> <212> <213> | 5943 389 DNA Glycine ma | × | | | | |
| <223> <400> | unsure at 5943 | all n locat: | ions | | | |
| tcaacacann | atgcgacccc | ggaacccagc | tgcaacccct | gtaaccagcc | acgacacccc | 60 |
| acacccacgc | gtgacccgct | gcacataaca | accagcagcg | acgacccacg | gcgtgaacgg | 120 |
| cggcgacgag | cacggcgtga | acgacggcga | cgacccacac | gcagaacatc | gcgatccaac | 180 |
| tctgttgggc | atcttgaagc | tttattttt | tttgggtttg | tttttgctgt | ttgacacccc | 240 |
| ttttttctgt | ctgtaacttt | ttttcccttt | ttctatttga | caccctcttt | ttactttcga | 300 |
| caattccatt | tttattttt | ttttctattt | gacaccacaa | tttttttgt | tcagtcctct | 360 |
| tttaaatggc | tgaaccatca | tccgatgct | | | | 389 |
| <210> <211> <212> <213> | 5944 452 DNA Glycine max | · · · · · · · · · · · · · · · · · · · | · | | | |
| <223> <400> | unsure at a | all n locati | ons. | | | |
| agcttctatt | ttactgtctc | cgtgtgaggg | tcgtttctct | ttctgtggac | attatttcac | 60 |
| aaatttcaat | ggtggagatg | tgcaaaaatg | ggttccaaag | gtggtatcga | aatttcacga | 120 |
| caatccaaca ' | gttgacgagt | ctgaaatcgt | agttttacga | agacaggttt | tgggtctctg | 180 |
| tggaaaaaga | gaaagctacg | atacgaatga | catttctctc | acctcagata | atatttcgca | 240 |
| nattccaaca | atgagaatgt | tcgaaaatga | gttctgaaag | gtgctcaaat | ttcatgatga | 300 |
| tccaacggtt | aacgagttcg | ggatcgttat | tttactgaga | caggtttgag | tgtatgtggg | 360 |
| acaaagagag | gattttaaga | gaagaagaag | ggataacatt | attgagagga | agaggaagcg | 420 |
| taaagatgta | ttgtcagtct | gaaaactaac | ct | | | 452 |

| | <210> <211> | 5945 220 | | | | | |
|---|----------------|-------------|--------------|------------|------------|------------|-----|
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| | <213> | Glycine ma | ax | | | | |
| | <223> | unsure at | all n locat | ions | | | |
| | <400> | 5945 | | | | | |
| | actaagetti | aaataaggg | . ccasacacta | 22224544 | | | |
| | accaageeee | aaacaayyyc | CCaaacactg | aanagtegte | catgaatato | tcttaataca | 60 |
| | tttctccacc | atgtctgaca | ı aaatggccag | catgcacctc | tgaaatgcgg | ctggtgcatt | 120 |
| | acataaccca | aatggcatct | gtctataggc | 222020200 | 222000025 | taaaggccat | 100 |
| | | aacggcaccc | geeededagge | aaayacacca | aaagggcacg | Laaayyccal | 180 |
| | cttctcccga | tccttggggt | ccaccgagat | ctggttataa | | | 220 |
| | | | | | | • | |
| | <210> | 5946 | | | | | |
| | <211> | 384 | | | | | |
| | <212> | DNA | | | | | |
| | <213> | Glycine ma | х | | | | |
| | <400> | 5946 | | | | | |
| | agget at aga | ******** | | | | | |
| | agettetega | tatattatge | gcctcaatcg | taccttcgtg | tgttaagtta | tgaccatttg | 60 |
| | agttctggcg | tgcttccgtt | tttcaatttc | aagcttctcg | atatattatg | cgcctgaatc | 120 |
| | ggacttccgt | ttgaaaagtt | aggaccattt | gaatttgtag | agaggatttg | ++-+ | 100 |
| | | | | | | | 180 |
| | tcgagcgtgt | cgatgtatta | tgcgcctgaa | tcggacttcc | gtgtgacacg | ttatgaccat | 240 |
| | atgaatttct | agagagettt | cgctgttcaa | tttcgagcat | ctagatatat | tatacgcctg | 300 |
| | | | | | | | 300 |
| | aatcggactt | ccgtgtgacg | agttataacc | atttgaatct | ctcgagagca | tccgtgtttc | 360 |
| | atttcaacct | tcttgatata | ttat | | | | 384 |
| | | | | | | | |
| | <210> | 5947 | | | | | |
| | <211> | 471 | | | | | |
| | <212> | DNA | | | | | |
| | <213> | Glycine max | x | | | | |
| | <400> | 5947 | | | | | |
| | 11007 | 3347 | | | | | |
| | tggaaatgaa | caacggaagc | tctcgagaaa | aaaaaatggt | tataacttat | cactcggacg | 60 |
| 1 | tccgattcag | gcgcataaaa | tatcgagacg | ctcgaaattg | aacaaccaat | actattaeae | 120 |
| | | | | | | | 120 |
| ě | aattcaaatg | gtcataactt | gtcacacgga | agtccgattc | aggcgcataa | tatatcgaga | 180 |
| ć | agctcgaaat | tgaacaacgg | aagctcttga | gaaactcaaa | tggtcataac | ttgtcacacσ | 240 |
| | | | | | | 9 | |

| gaagtccgat | tcaggcgcat | aatatattga | gatgctcgaa | attgaacaac | aaatgctctc | 300 |
|----------------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| gagaaattca | aatggtcata | acttgtcaca | cggaagtccg | attcaggcgc | ataacatatc | 360 |
| gagacgctcg | aatatgaaca | accaaagctc | tcgagaaatt | caaatggtca | taacttatca | 420 |
| cacggacgtc | cgattcaggc | gcataatata | tcgagacgct | cgaaattgaa | С | 471 |
| <210> <211> <212> <213> | 5948 436 DNA Glycine ma | x | | | | |
| <400> | 5948 | | | | | |
| agctggtcgc | ataactctac | tcgatgttag | tttttaaagg | tgtgggtgtt | cgagatattg | 60 |
| aaagaagggt | gaaaaaaggg | aaggacatgg | aacacatctg | ggatttcgtt | ttcggacata | 120 |
| aaataaaaat | tattgtcccc | aactagtcag | tttttttt | cttcaaaaag | taatattaat | 180 |
| gttagcctag | ctgacactta | taataacata | tttcttcaaa | attatcattt | aatgtggagt | 240 |
| atgactgaca | caagtaaaaa | actataaaat | aaaacatcaa | tgaaaatcaa | ttaatgccta | 300 |
| cgtagtgtca | gttgatgcta | tattgtgtta | gtctcaaaac | tattcctaca | gggtcgcatt | 360 |
| aatttgatct | ttctttgagc | gcataatctc | accaccttct | ttatttcttc | gattgtatcc | 420 |
| taatagttta | gtatat | • | | | | 436 |
| <210> <211> <212> <213> | 5949 385 DNA Glycine max | c | | * | | |
| <400> | 5949 | • | | | | |
| aaattggtcc | aaaacaaaac | gtgagcccca | tagacagcat | ccaatagatg | tcataccttt | 60 |
| tctgttacat | atcgtggtag | tgcaattgat | gccagattgc | acacagcagt | ctcagttgga | 120 |
| cttgaatatt | caattatctc | agtacacaaa | gctgacgatt | taattggacc | caaattctgg | 180 |
| tgattgcttt | tcctattgca | agtatgctag | tagttgtaac | aaaaatgctg | gaattactca | 240 |
| tcgggtgaga | acaataaata | caaaatctca | tgaggaaagt | caaagacatc | taagaacacc | 300 |
| accttataaa | gcatgtacgg | gggtgcggct | tctatctgtg | acttcagaat | ttcgaaccag | 360 |
| aggetetata | cctggacaac | cttca | | | | 395 |

| <210> <211> <212> <213> | 5950 421 DNA Glycine ma | | | | | |
|----------------------------------|----------------------------------|------------|------------|------------|------------|-----|
| \Z13> | Gracine ma | ıx. | | | | |
| <400> | 5950 | | | | | |
| agcttgtaat | aaccagaaat | tattttttgt | tatatgaacc | catacaaagt | caattatcaa | 60 |
| tggcagtgat | gcaaaaccac | ttgtttagat | gactgagtat | agatetette | cctggtgtat | 120 |
| ttatatagtt | : acttgtacaa | tttaattttc | tttaatgcct | tctacaagca | atatgtcttg | 180 |
| ggcaatgcac | : tgtacaaagg | gatgtttcaa | attgtggtgg | aaatgggttg | aataactcat | 240 |
| caatatactt | ataagtttat | taattttatc | aatatattac | aaaaacattt | tcaacaaatt | 300 |
| gtatctcttg | aaaaccaagg | cttagacctg | ttggcttttg | taaaagctat | aatgcaaagt | 360 |
| aagcctttta | ggttaggcca | ggcacaaaac | gaatagccta | tttcttataa | tagactggac | 420 |
| t | | | | | | 421 |
| | | | | • | , | |
| <210> <211> | 5951 447 | | | | | |
| <212> | DNA | | • | | | |
| <213> | Glycine ma | x | | | | , |
| <400> | 5951 | | | | | |
| gcagaaaaca | agttaaatta | tacattcaaa | aatgttgact | ttttaaaact | tgagagtaaa | 60 |
| caattcacat | cttaaatctc | ttcaacatcc | atgcattgac | ttaagtaaag | ataaacataa | 120 |
| tggttgtcac | tctaaaggcc | atacaaaaat | aaagtaaagt | aatttacata | aatccataaa | 180 |
| gaaattctat | aaatgtatga | ccctgccttg | atgtcatagc | tatcaaacca | acgatcctac | 240 |
| cttaaaatat | atctaaacat | atgaagttaa | gcctgttctc | tagcattatg | ttcactactc | 300 |
| tgatgatcct | tacctttgtg | tggcaatcaa | cccaaacaca | tacaacaaaa | acagataggg | 360 |
| gaatgagata | catcttacca | catataacaa | tataataatt | aaaggcaact | tagaatcata | 420 |
| catcattaca | cgttgcaact | tattcac | | | | 447 |
| 0.4.0 | | | | | | |
| <210> | 5952 | | | | | |
| <211> <212> | 429 DNA | | | | | |
| <212> | DNA Glycine max | | | | | |
| ~~~~ | Gracine max | • | | | | |

| <223> <400> | unsure at 6 | all n locat | ions | | | |
|-------------------------|---|--------------|------------|------------|------------|-----|
| agctntcagt | ttgtctaccg | aagcatggct | gtggttgttg | ngaaaatgtt | gtgcttgata | 60 |
| aatgttaagg | tcaattcttt | cttttattaa | cagtgctttt | gaaccatttt | gtacttttgg | 120 |
| tcaacaacct | actgtagaaa | agtgtgattc | gtgcatccct | ttgttgcatg | tgttggctca | 180 |
| tacctttgcg | ccctgggctg | ttgcatctaa | tatagggcct | ttttttaaac | agttacaagt | 240 |
| cattgagtgc | ttaaaatata | tttgttctgg | tgctcatcct | gatatggaaa | tgcatgtgag | 300 |
| tatattacga | gtagtctttt | gtttcccctt | attgaatggn | gaaattaagt | tcatttggct | 360 |
| acttgggtaa | actacccgct | tctatatatc | ttttattcaa | aatgccttca | tcaaaatacc | 420 |
| atcttctac | | | | | | 429 |
| <210> <211> <212> <213> | 5953 394 DNA Glycine max | | | | | |
| <223> <400> | unsure at a | ıll n locat: | ions | | | |
| gaacatatgc | ttagagataa | gctaggtgtt | gtgtctttag | tcaatactta | aataattatt | 60 |
| acaaaagtca | accattttcc | cattaataat | aatntatatt | tgaatattct | ttggttattt | 120 |
| gctcatgaca | actatataat | ttaaatccaa | atcatgtatt | cctcatcgat | gtgtaatcta | 180 |
| ttatcaattg | cttactctcg | ttaagattat | tgttctctta | actgtagaat | gggggcaact | 240 |
| ttccctcaac | tctaaacttt | tgataataaa | caataaaaag | ggaaagaaat | gttcttataa | 300 |
| gttgaagaan | anaaaagata | acactcatat | gtcatagaat | acaatcacat | aaattatcat | 360 |
| cactgctatt | caagcttata | ccaattatgt | atat | | | 394 |
| <211> <212> <213> | 5954 390 DNA Glycine max 5954 | | | | | |
| agcttgaaac | attggaaatc | ttggcttcat | tcccatcttc | cggctggatc | ttcccactta | 60 |
| | gggaaacttc a | | | | | 120 |

| tttgaatta | gatactgttt | ctgtaaagac | : attaattgaa | tggtattgag | ttgactggtg | 180 |
|-------------------------|-----------------------------------|------------------|--------------|------------|------------|-----|
| cagctatttt | gtactcaaaa | a gaagccaaat | agaagtcatc | aagtttttg | tttggtatga | 240 |
| taaactaggo | ataacacttt | tggccaatag | tagttgattt | tagttgcttg | ttagcatata | 300 |
| atggattcad | tataattgct | tggaaaatag | tctactaatt | taaacttatc | aaacaaccat | 360 |
| tatatacgag | , atctcaattt | acacattaaa | | | | 390 |
| <210> <211> <212> <213> | 5955 388 DNA Glycine ma | x all n locat | ions | | | |
| <400> | 5955 | | | | | |
| tcggatgtat | gatgaaatat | taaaatataa | ttctttgaac | tntctgatgc | catgatgaga | 60 |
| aaagagtaaa | ttgtatagga | ttctcatatg | caatgcaaaa | ttgggctggc | cttattgaac | 120 |
| ttgggtccaa | tggatctagg | agatccatac | agtacaagtt | acttgagaaa | gtttgcttca | 180 |
| gctagataga | gagaccaaca | agaaagcttc | agctagataa | ataattccct | cctatatttt | 240 |
| ctccaagatg | tgctctttt | gagaaattta | ttcctgaaaa | taatacaaag | aaggagcttt | 300 |
| ttatccatgg | tgacgtcatg | aaactcaatt | ctatttgctc | taatgctgta | ctcaatcttt | 360 |
| tgcttgatgt | atatatataa | ttatgcat | | | | 388 |
| <210> <211> <212> <213> | 5956 318 DNA Glycine max | × | | | | |
| <400> | 5956 | | | | | |
| agcttgtcgg | gttcaatttc | aattaagcgc | ttggggcatc | ccacggactg | agcaaaaggg | 60 |
| ctcaggttat | caaaatattg | cacgtctttt | aaagcacaaa | gcgaggatca | gaacctcaac | 120 |
| cctacgttct | tttttttaaa | aagactgcga | tgagagatat | tacaaaggac | aggaacccct | 180 |
| gtgggaaacc | aagaagaaca | tacaaaaata | aaacatgcaa | cggcttcctc | aattgcccca | 240 |
| gatattaagc | gtagtatcgc | ttgacaacgt | tggagttcac | gggtgaaggt | agctcctcgt | 300 |
| cattcatgtt | ggcgagca | | | | | 318 |

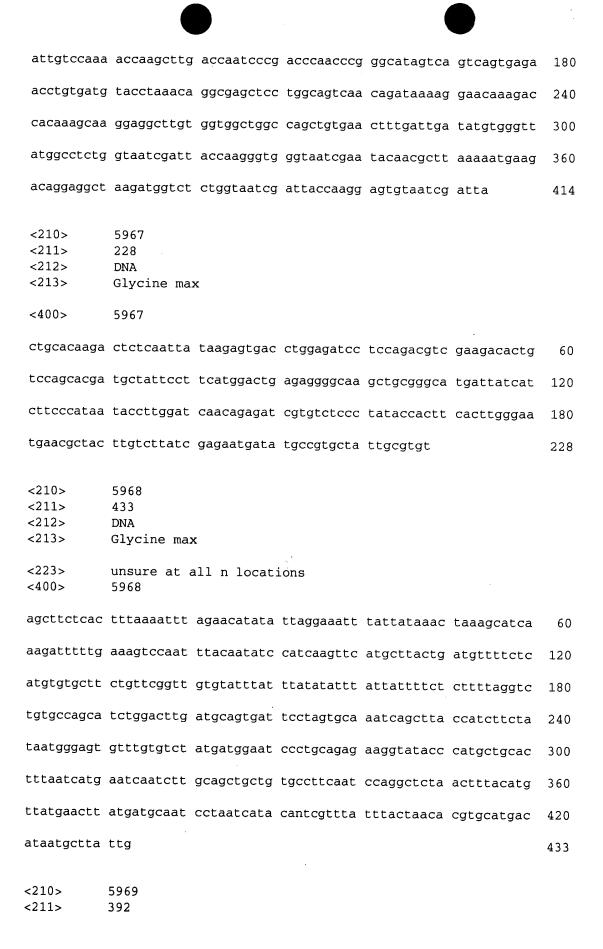
| <210> <211> <212> <213> | 5957 434 DNA Glycine max | | | | |
|--|---|------------|------------|------------|-----|
| <223> <400> | unsure at all n locat: 5957 | ions | | | |
| tgcctcanag | aggtccagga aggacaatgc | ggccgaagga | tctagttctg | ctcctgagta | 60 |
| tgacagtcac | cgctttagga gcgctgtaca | ccagcagcgc | ttcgaggcca | tcaagggatg | 120 |
| gtcatttctc | cgggagcgac gtgtccagct | canggacgac | gagtatactg | atttccagga | 180 |
| ggaaataggg | cgccggcggt ggacatcact | ggttactccc | atggccaagt | tcgatccaga | 240 |
| aatagtcctt | gagttttatg ccaatgcttg | gccaacagag | gagggcgtgc | gtgacatgag | 300 |
| atcctgngta | aggggtcagt ggatctcgtt | tgatgctgac | gctatcagcc | agctcttggg | 360 |
| atatccgttg | gtgttggaag agggccagga | atgcgagtat | ggccagagga | ggaaccggtc | 420 |
| tgatgggttc | gatg | | | | 434 |
| <210> <211> <212> <213> <223> <400> | 5958 400 DNA Glycine max unsure at all n locati 5958 | ons | | | |
| agcttgcttg | tggngcttct atggaggttg | tatctttgag | cttcaattgg | gtcctttaat | 60 |
| ggtgattttc | gaccatgaag atgcagcgga | agacaaagga | aaataggtga | gaggaggcgc | 120 |
| catccattaa | ggaataagcc atggaagaag | gagcttcacc | accaaaatga | gtcttggata | 180 |
| agaagcttgg | agaggatgct tcaatggagg | aaaagaaaga | gggagagaaa | gagagaggg | 240 |
| ggagcacgaa | attgaaggaa taaaagaggt | atagaagtgg | aactttgaag | tatgtctcac | 300 |
| aagactctca | ttcatcaaag ttacaacaag | tgttacacat | gcttctattt | atagactagg | 360 |
| tagcttcctt | gagaagcttt cttgagaaaa | cttccttgag | | | 400 |
| <212> | 5959 405 DNA | | | | |

:

| <223> <400> | unsure at all n locations 5959 | |
|-------------------------------------|---|-----------|
| tctacaagaa | a gagatggcca cggggatcaa gaatggacta ctcatcaaaa gtaata | aagg 60 |
| agaaaatcac | c aaggagetga attggageae tttgaagatt gttgaatage tegett | agcg 120 |
| gcaccaacto | c gctaagcaca attccagctc gagaagaaat tgtgcttagt gcgaat | gccc 180 |
| cgcttagcgg | g aaacctttca ctagaatttt cgaaaaactt gtgtctactt gtgtac | cagg 240 |
| cttcaagctt | gatgtagata ggccttaaat ggtgtgttta aggggttatt agaggg | rttag 300 |
| ttaccttctt | atgcctagcc ctataaatac tcaaaaactc ttaattntgg aaaatt | nttg 360 |
| tagaattgaa | a attaagttgt gettagagag agetntagee tette | 405 |
| <210> <211> <212> <213> | 5960 284 DNA Glycine max | |
| <223> <400> | unsure at all n locations 5960 | |
| agcttttctt | tgtgggttga taggttctgt ctcgtagaat ggcatgatca ttggct | gaca 60 |
| tgttctcaat | cageteagtt gettetteeg gngtetteat tintatettt ecceet | gcag 120 |
| aagcatctaa | cagttgcttt gtttgtggtc tcagcccatc tataaacata ttcaat | tgga 180 |
| ttggatcaga | aaacccatga gtggaagttc atctcaacaa gcctctgaac ctttcc | aatg 240 |
| cttcacttag | agacttatta ggacactgat ganatgaaga gatt | 284 |
| <210> <211> <212> <213> <223> <400> | 5961 317 DNA Glycine max unsure at all n locations 5961 | |
| | aggtccagga aggacaaggc agcagaagga actagttccg ctccgga | agta 60 |
| | cgctttatga gcgcggtaca ccagcaacgc ttcgaagcca tcaaggg | |
| | cgggagcgac gcgtccagct cagggacgac gagtatactg atttcca | |
| | | |
| | cgccggcggt gggcaccact ggttactccc atggccaagt ttgatct | |
| aucagecee | gagttttatg ccaatgcttg gccaatagag gagggcgtgc gtgacat | gag 300 |

| atcctggtta | a ggggtca | 317 |
|----------------------------------|--|------|
| <210> <211> <212> <213> | 5962 372 DNA Glycine max | |
| <223> <400> | unsure at all n locations 5962 | |
| agctntaaag | g gatgattgta ttatataact tataaaacgg tttcccaatt aaaaaggaat | . 60 |
| aaaaatgtgt | ggcagtataa ggataagaca taanagctgc gaacagttga acaagaatag | 120 |
| gaaccttgga | a atatggaaat cgaaggaaac agataaaggc tgaaggtgcc accgtaatag | 180 |
| tctttccctt | tattcaacgt tcaatcataa aggetggteg accaacgtgt geteatecat | 240 |
| gtcaaattga | a atttggatat tttaaatttt aatcttataa atcgaaaaat ataattaaga | 300 |
| ataaatactt | tattacagaa aaatacatat ttttgtacga atataagtat tggaaaggta | 360 |
| ataaattctt | ; ga | 372 |
| <210> <211> <212> <213> | 5963 356 DNA Glycine max | |
| <400> | 5963 | |
| tatccacctc | tcataaattt gaaagtcaat gtcaataaag tccaacgttg ctagatatgg | 60 |
| aaatatacga | gtcaaacttg ggttaggacc attgaggcat taaattaagt ttaatatac | 120 |
| agcgtagtgc | ttggctaaca aggaatggga aatcaagata ctacctcaaa ttcttttta | 180 |
| tcataagaat | ctttctgata aaattgttta tttcttcatg taaggctctt tttatattgt | 240 |
| atttttttat | taactatttt tatcaaaata tttctaatta cttataactc tttagttaac | 300 |
| aaatagtaga | gaaaaaatgt tatgcattaa aatgtaaata attatttatt atcact | 356 |
| <210> <211> <212> <213> | 5964 441 DNA Glycine max unsure at all n locations | |
| <400> | 5964 | |

| agcttgctaa | cccatggaag | ctcctaatat | ctcccacact | tttttaggtg | ggccattctt | 60 |
|-------------------------|---|-------------|------------|--------------------------------------|--------------|-----|
| ggatggcctt | gattttctca | gggtccactt | ggaccccatt | tctaccaact | acaaacccta | 120 |
| agaaaactat | attatctaca | caaaaagtac | acttctctat | atttgcatag | agggtgtttt | 180 |
| tcctaaggac | tgaaagaact | tgcctgagat | gtcctaagtg | atcatctagg | ctcctactgt | 240 |
| atactaaaat | atcatcaaaa | taaacaacta | caaatatacc | tatgaaatco | : cttaagacat | 300 |
| gatgcataag | cctcataaag | gtgcttggtg | cattagtgag | cccaaaaggc | atcactagcc | 360 |
| attcatacaa | accaaacttg | gtcttgaaag | cggttntcca | ctcatcaccc | tttttcatct | 420 |
| tgatgtggtg | atacccactt | t | | | | 441 |
| <210> <211> <212> <213> | 5965 465 DNA Glycine max | x | | | | |
| <223> <400> | unsure at a | all n locat | ions | | | |
| ctaagctatg | cacccctntn | ttcaatatta | atcaacctga | aatcacacac | aatcacaagc | 60 |
| aatcaactac | actcaatgca | aagaaaacaa | aattaaaaat | aaatgactgg | gtttcctccc | 120 |
| agcaagcact | tgtttaacgt | cattagcttg | acgcatcgct | ctgttatcct | agatcaatct • | 180 |
| tggttctctc | tttcagaacc | ttctcatcca | actccttcac | ctgtaagcac | acatcctggt | 240 |
| ccagcagttc | tcttccttca | ttaaatagat | caaagctgat | ttgttggttt | tcaagactca | 300 |
| tttctaactt | tttcttccct | atgtccacca | cacagettge | aatagacata | aatggacgtt | 360 |
| ccataatgac | aggaatattt | gcatcttcct | caatgttcat | tacaataaaa | tcagtaggaa | 420 |
| aaataagatg | ttntactcga | accanaacgt | cttcaatcac | tccat | | 465 |
| <210> <211> <212> <213> | 5966 414 DNA Glycine max 5966 | | | | | |
| | | agaagggtgt | ttattact | ************************************ | . | |
| | gaggaagtgt | | | | | 60 |
| grygracery | gagatatgtc | acaaaaacca | cyagaccttg | gggacgtcag | gtggggtgct | 120 |



· %:

| <212> <213> | DNA Glycine max | |
|-------------------------------|--|-----|
| <223> <400> | unsure at all n locations 5969 | |
| tggcgccaaa | cataagagct ttgcacaaaa atggtgaaca tataagtaga aaagaagaga | 60 |
| tttaagagct | tcataagaga gatttaagag aaggagtctg aagtcactca ctactatgga | 120 |
| gcttggaaga | agataaaaat ggtggtgtct tcctcattga aggtctcatg caagaagaag | 180 |
| aaaatgaagg | ttcaagtttt ggtttttgga gaggaaatgg taagaaatga tgagaagtga | 240 |
| tgcaaagcta | tgcctaattc tattgataag ctcacttgat actactacaa aatgtagatt | 300 |
| taaatcgcta | tttaacatcg gttnttgata aataccgatg ttaacaaaaa catggtggca | 360 |
| taatggtaaa | taatgtgact ntcttaacat cg | 392 |
| <210> <211> <212> <213> | 5970 360 DNA Glycine max unsure at all n locations | |
| <400> | 5970 | |
| agcttgttgg | gttcagcttc aattaagcgc ttgnggcatc ctatggattg cgcgaaaagg | 60 |
| cccaagtcat | caaatactac gcatctttta aagcacaaag tgaggatcgg aacctcaacc | 120 |
| ctacattctt | ttaaaagatt gtgatgagaa aattacagag gacaggaatc cctgtgggaa | 180 |
| accaagaaga | acacacaaaa ataaaaacat gtagcgactt ccttaattgc cccagatctt | 240 |
| aagtgtagta | tcacttgaca acgtcgaagt tcatgggtga aggtagctcc ttgtcatcta | 300 |
| tgttggtgag | caccagggcc cttccggaga aagccctttn tacaacaaag gcccttcgta | 360 |
| <210> <211> <212> <213> <223> | 5971 416 DNA Glycine max unsure at all n locations | |
| <400> | 5971 | |
| tgaagcatga | gccgttctga gagcttaaga tgagnttgtg agtgattgtg agatcctaga | 60 |
| ggtgcaggag | acatecteae caettgtatt ttttcaatet tteatettgt tettetett | 120 |

<210>

| gttgtaaaga | aggcttccta | gttatcgaaa | gctaaatcct | ctgttggatc | ttccctatag | 180 |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| gtacctgatg | taaatatatt | tttatttatt | taatģatgtt | ttgtgtgttc | tctgtgctat | 240 |
| ctgcttttca | ctccagtatg | cctttacctt | gatcacgcag | atgcatgctt | tgttagggtc | 300 |
| attcaactat | ggaaactggt | ctgattctaa | agtccttgag | agtacatggc | taagttgtcg | 360 |
| tactatcacg | aggaatcagg | gtgcgataat | ttagttgtgt | atgtgtttct | taatgc | 416 |
| <210> <211> <212> <213> | 5972 362 DNA Glycine max | × | | | | |
| <223> <400> | unsure at a 5972 | all n locat: | ions | | | |
| agcttttatc | tagccaagat | catacaaaag | tgttacaaca | gaacctaacg | gtttctaatt | 60 |
| atgtgggcca | tcaaatctat | catgtgtnga | caataattga | ttagcccatg | aatttcctct | 120 |
| ggggctgaac | acacttcggc | gatggccatc | gctntggctt | gtagtcgcgg | gaggtcttga | 180 |
| cttccattta | aggtcaaggt | gaacctatcc | atccacatgg | tcgcttcttg | atgcaatgca | 240 |
| tcaatcaccc | tccctcttgc | ttccttctcg | gcgtacgctt | gtgtgaagtc | ctctactagc | 300 |
| ttttgttcat | gggtcaaaga | ctggtttaac | tcttcttgta | ctgccctatg | atagctagca | 360 |
| tg | | | | | | 362 |
| | 5973 292 DNA Glycine max | | | | | |
| | unsure at a 5973 | ill n locati | ons. | | | |
| tctatagaaa | ggtcattcct | aatttctcta | caattgcatc | acctctcaat | gagctagtga | 60 |
| agaagaatgt | ggcatttacc | tggggtgaaa | aacaagagca | agcctttgct | ttgctcaaag | 120 |
| aaagcttac | taaggcacct | gttctagctc | ttcctgactt | ttctaaaact | tttgagctag | 180 |
| | | | | gcaaggtggg | | 240 |
| cttattttag | tgaanaactt | catggtgcca | cccttaacta | ccccacctat | ga | 292 |

| <211> | 312 | | | | | |
|------------|-------------|--------------|------------|------------|------------|------|
| <212> | DNA | | | | | |
| <213> | Glycine ma | ıx | | | | |
| <400> | 5974 | | | | | |
| agcttggggc | tgctgccaat | ggtggctccc | gtaagcttgt | tgaaggttct | tgagctttgg | 60 |
| gaaagaaatg | gggtgaaaat | ggcttcaccc | cccccccc | ctttaagttt | tctcatcaaa | 120 |
| ccacgctcgc | ccaagcgagc | : tgatttcaat | ttttttttg | caaaaatatt | ttttgcaaag | 180 |
| ctgtgctatt | cattgttata | ttttctctct | aaaaatccta | taattgcata | taaacttagg | 240 |
| cgaattcagg | atataattca | agaaaacgaa | caagtatgaa | aaaggaaatt | aaagagcaca | ,300 |
| tttagagata | ct | | | | | 312 |
| <210> | 5975 | | | | | |
| <211> | 452 | | | | | , |
| <212> | DNA | | | | | |
| <213> | Glycine ma | x | | | | |
| <223> | unsure at | all n locat: | ions | | | |
| <400> | 5975 | | | | | |
| tcaattataa | gaacttgagg | agatatgctt | agaaggtat | ananataa. | 200444 | 60 |
| | | | | | | 60 |
| | | atgactctaa | | | | 120 |
| | | ctcgcttcaa | | | • | 180 |
| | | ctaatgttnt | | | | 240 |
| | | agtgaacggt | • | | | 300 |
| | | gcggacctct | | | | 360 |
| | | gagtttccat | | tgtatgttgt | cacttttgtt | 420 |
| gcctttcatt | gcatgctcac | attgagaaca | at | | | 452 |
| <210> | 5976 | | | | | |
| <211> | 398 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine max | c | | | | |
| <400> | 5976 | | | | | |
| agcttacagt | tcaaatcaaa | agacatcttt | ttgtaatact | gatatactct | ccagagattt | 60 |
| gagtttttct | tttttagctt | atcaagttca | ttattagcaa | tggttcattc | ttttttaagt | 120 |

| aagagtttt | t gtttaggcat | ttccttgcac | ccttcttttg | g aatcttcaaq | g agttgtagtt | 180 |
|----------------|-------------------|--------------|------------|--------------|--------------|-----|
| gattttacco | c tttcttccaa | gtcttgaaaa | tccttaagaa | gagtttttc | g cccactagat | 240 |
| gtatttttgt | ccaatagtgo | tttgacttcc | tcacaaatag | aggtatctat | tcactactag | 300 |
| gcgaagaagt | ttccaggaca | aaattaacta | agtgaacttg | atgagctttc | ttgaaatcct | 360 |
| catgctctct | ttcaagatgt | ttaacacctt | ttatttaa | | | 398 |
| <210> <211> | 5977 468 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine ma | x | | | | |
| <223> <400> | unsure at 5977 | all n locat | ions | | | |
| | | | | | | |
| | | | • | | gggaattcaa | 60 |
| | | | | | attcattaaa | 120 |
| | | | | | gcttccttga | 180 |
| | | | | | gagaagttag | 240 |
| aggggggcta | ctcacacccc | tccaatagct | atgctcagcc | ccatgccaaa | atatatgana | 300 |
| atacaatggg | aagcttcctt | aagaagcgag | gaaggtagct | tccttgggaa | gcaaggaaga | 360 |
| | | aggaagggag | | | agctaagctc | 420 |
| acccncgtgt | canaatacat | gaaaatacca | aaaaagtcct | tactacaa | | 468 |
| <210> | 5978 | | | | | |
| <211> | 294 | | | | | |
| <212> | DNA | | • | | | |
| <213> | Glycine max | c | | | | |
| <223> <400> | unsure at a | all n locati | ons | | | |
| agcttgtccg | agcagttgag | caagaccgaa | taaaatatgt | gggccatcac | cgactagtac | 60 |
| aaggaaaagt | taagcctatc | agcgactcat | gagcaaaggc | tagaggatga | gtacaacaag | 120 |
| gtatcaatcc | tgcaagcgaa | aaggaaagca | agggaaaggg | tgatcgattc | attgcacaga | 180 |
| gaagcaatga | tgtggatgga | ccacttcgtc | tgggagtcaa | gaacttccct | aactgctagc | 240 |
| caaggccana | ggaatggcgg | atgtgtactt | agttctcgag | gaggttcacg | ggct | 294 |

| <210> <211> <212> <213> | 5979 338 DNA Glycine max | |
|----------------------------------|--|-----|
| <223> <400> | unsure at all n locations 5979 | |
| tanactcana | aagaaaggtg gagaataaag tgagtgaacg actagaaaat agcttgtatg | 60 |
| catcacttgg | tttcaggttt gtcatcatca aacaggggga aattgtggaa gcaaagctac | 120 |
| gatgatgatt | . caccaagaga tgatgccaaa gctcaaagag gtttttcaag attaaagaat | 180 |
| caagcattca | . agattccact caaagattca agaatcaaat gaagaaatca agaagcatca | 240 |
| agccaagtca | aagtaggtag ttaaaagtat atttttcana aaacatcaaa tagcacactc | 300 |
| tttcgtttaa | aaaggattct ctgaaatgtt ctaagtta | 338 |
| <210> <211> <212> <213> | 5980 370 DNA Glycine max | |
| <400> | 5980 | |
| agcttctagc | caaatggact taccttgaat taattccttt gatagcccct ttgagcctat | 60 |
| gttccccttt | ctttgttttg aagctcatta caaaccttaa atgaaaaacc atgatatcac | 120 |
| cttaccctta | aggaattttg gagctttgga attgttttgg gaataagttg ggaataagtg | 180 |
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| <pre><211> 437 <212> DNA <213> Glycine max </pre> <pre><400> 5990 agcttgcata aagaaatgtc agaggatgaa attgcatgtg gctgtattag agcacattga 60 agagaaaggt gtcatgagaa gaaaagaggg gttgtttccc taattattaa ctaactgcaa 120</pre> | | · | | | | | 1,2 |
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| <400> 5990 agcttgcata aagaaatgtc agaggatgaa attgcatgtg gctgtattag agcacattga 60 agagaaaggt gtcatgagaa gaaaagaggg gttgtttccc taattattaa ctaactgcaa 120 | | | | | | | |
| agcttgcata aagaaatgtc agaggatgaa attgcatgtg gctgtattag agcacattga 60 agagaaaggt gtcatgagaa gaaaagaggg gttgtttccc taattattaa ctaactgcaa 120 | <213> | Glycine max | ζ | | | | |
| agagaaaggt gtcatgagaa gaaaagaggg gttgtttccc taattattaa ctaactgcaa 120 | <400> | 5990 | | | | , | |
| | agcttgcata | aagaaatgtc | agaggatgaa | attgcatgtg | gctgtattag | agcacattga | 60 |
| ccaccaagtc acaaggtggt aaccttgctg ttcgacaatg gctcgcccac tatccatcag 180 | agagaaaggt | gtcatgagaa | gaaaagaggg | gttgtttccc | taattattaa | ctaactgcaa | 120 |
| | ccaccaagtc | acaaggtggt | aaccttgctg | ttcgacaatg | gctcgcccac | tatccatcag | 180 |

| | | | | | , | |
|-------------------------------------|--|------------------|------------|------------|------------|-----|
| actaatgcaa | ctgttttaac | aaattatttg | gctacatatt | tcaaaacata | taacctaagt | 240 |
| ttagcttaat | taaaaatgaa | ccttaagaaa | gtgtttgacc | ccattgtact | gcaaaagaat | 300 |
| gagtattctc | attgaaatct | tgtccaaatg | aaggtgcact | gaaacaagta | cgaaatgaat | 360 |
| ggattttaga | agaatatcat | accttttgcc | ttaatgaata | gctagcagct | ctaataccag | 420 |
| caaattcatc | aactaac | | | | | 437 |
| <210> <211> <212> <213> <223> <400> | 5991 458 DNA Glycine ma: unsure at a | x all n.locat | ions | | | |
| | | tttaaggaat | ggggggtgtg | tccatttgag | | 60 |
| | | | | | | 60 |
| | | | | cacaaaagtg | | 120 |
| aacctttgaa | acgctaaaaa | tcctgcctcg | gtttgtgtgc | cgtttctctg | gttccagttt | 180 |
| ctcgcgtttc | tctgcgtccg | tcggggccag | ttttcgaaag | taagcaatat | atatatcaaa | 240 |
| acgctcataa | tagaaccctg | agcgtggttc | agaggttggt | ttcgttaaat | tctaagtcgc | 300 |
| acacaaaacg | atgattntta | aactaattaa | ttaagaatta | acccataacc | ctccagttat | 360 |
| ggatttctct | tccttaatta | gcctaacccg | cgtatcttgc | ccncactact | cctacttcta | 420 |
| ccaagaacac | atatgcatat | acactgaata | aaacttat | | | 458 |
| <210> <211> <212> <213> | 5992 412 DNA Glycine max | ς | | | | |
| <223> <400> | unsure at a 5992 | all n locati | ons | | | |
| agcttanaca | ttcaatttct | aggctctcga | tatattacgg | gacttaatca | agcatccaag | 60 |
| aaaaaattta | ttgtcgtttg | aatttgctca | gagattcaac | attcaatttc | gagcgtctcg | 120 |
| atatattacg | ggactcaatc | agacatccga | gtaaaaagtt | attgtcgttt | gaattggctc | 180 |
| cgagcttcaa | cattcaattt | cgagcgtctc | gatatgttac | gagactcaat | cagacatccg | 240 |
| agtaaaaagc | tattgtcgtt | tgaatttgct | cagagattca | acattgaatt | tcgagggtct | 300 |

| oguduceca | cgggactcaa | tcagacatcc | gagtgaatag | ttattgtcgt | ttgaattggc | 360 |
|--|---|---|--|--|---|--------------------------|
| tcagagcttc | aacattcaag | ttcgagggtc | tcgatatatt | acgggactca | at | 412 |
| <210> <211> <212> <213> | 5993 362 DNA Glycine ma | x | | | | |
| <400> | 5993 | | | | | |
| atgagccaat | tcaaacgaca | ataactttt | actcggatat | ctgattgagt | cccgtaatat | 60 |
| atcgagaccc | tcgaaattga | atgttgaagc | tcttagcaaa | ttcaaacgtc | aataagtatt | 120 |
| tactcggatg | tctgattgtg | tcccgtcata | tatcgagaca | ctcgaaattg | aatgttgaag | 180 |
| ctctgagcca | attcagacga | caataacttt | ttactcggat | gtctgattga | gtcccgtaat | 240 |
| atatcgagac | actcgaaatt | gaatgttgaa | cctctgagcc | aattgaaacg | acaataactt | 300 |
| tttactccga | tgtctgattg | agtcccgtca | tatattgaga | cgctcgaaat | tgaatgttga | 360 |
| gc | | | | | | 362 |
| <210> | 5994 | | | | | |
| <211> <212> <213> | 419 DNA Glycine max unsure at a | k all n locati | ions | | | |
| <211> <212> <213> <223> <400> | 419 DNA Glycine max unsure at a 5994 | all n locati | | ghagagaaga | | |
| <211> <212> <213> <223> <400> agcttgccgc | 419 DNA Glycine max unsure at a 5994 ccagctcgtc | all n locati caggcgagca | tggttgcttc | | | . 60 |
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| <211> <212> <213> <223> <400> agcttgccgc tggaggaatc taaatgcacc acgaatttcg tatttactct | 419 DNA Glycine max unsure at a 5994 ccagctcgtc ttctggaggg cccttttct taacgatact tttttacctt | caggcgagca cccaagtggg atttttttgt tattttcctt tcgaagaagt | tggttgcttc cctggttgct aattcttttt ctgtaagggt tacggaaact | atttgcaccc ccgtaacgtt acgaatcctt cacggattgc | ccttttttac acgaaacttt atggattatg gcanaaacac | 120 180 |
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| <211> <212> <213> <223> <400> agcttgccgc tggaggaatc taaatgcacc acgaatttcg tatttactct | 419 DNA Glycine max unsure at a 5994 ccagctcgtc ttctggaggg cccttttct taacgatact tttttacctt | caggcgagca cccaagtggg attttttgt tattttcctt tcgaagaagt actacggaat | tggttgcttc cctggttgct aattctttt ctgtaagggt tacggaaact ttcacggatc | atttgcaccc ccgtaacgtt acgaatcctt cacggattgc acgcaagcct | cctttttac acgaaacttt atggattatg gcanaaacac gcttcctttt | 120 180 240 300 |

| <213> | Glycine ma | x | | | | |
|---|---|--|--|--|---|--|
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| cgattacaca | gtgcaaattt | tgaattcaaa | ttttagtagc | tgttgtaaat | cagttttggc | 120 |
| cactggtaat | cgattacatc | ctctggtaat | cgattaccag | agagtaaatc | tcttgaaaaa | 180 |
| gactttntaa | cttaaatttc | ttggccaaac | cttttgctac | ttcaatagga | attcccttcc | 240 |
| tattttaata | tactctttct | aagactctag | aaactgtctt | gatcatccat | cttgaatatc | 300 |
| tttgtcttga | ataaagcttt | gagaaacacg | taaccctttg | gcaagctttc | cctttggcac | 360 |
| catcaaaaca | ttcagcttga | tcctttgtct | acaatctccc | nctttttgat | gatgacaatc | 420 |
| ctganatcaa | gacaagctat | atacaagatg | atagcacg | | | 458 |
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| | | | | | | |
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| | | aagctctcga | tatactcaaa | tggtcataac | ttatcacacg | 60 |
| agcttgaaat | tgaacaactt | aagctctcga aatatatcga | | | _ | 60 120 |
| agcttgaaat | tgaacaactt tcacgcgcat | | gacactccaa | attgaacaac | gtagggtctt | |
| agcttgaaat aacgtccgat gagaaattca | tgaacaactt tcacgcgcat aatgttcata | aatatatcga | gacactccaa cgaaagttca | attgaacaac attcaggcac | gtagggtctt | 120 |
| agcttgaaat aacgtccgat gagaaattca gagaagctca | tgaacaactt tcacgcgcat aatgttcata aaattgagca | aatatatcga | gacactccaa cgaaagttca tcgtgaaatt | attgaacaac attcaggcac cacatggtca | gtagggtctt ataatacatc taacttgtca | 120 180 |
| agcttgaaat aacgtccgat gagaaattca gagaagctca cacggaagtc | tgaacaactt tcacgcgcat aatgttcata aaattgagca tgattcatgc | aatatatcga acttgtcaca acgaatgctc | gacactccaa cgaaagttca tcgtgaaatt tcgagacgct | attgaacaac attcaggcac cacatggtca cgaaattgaa | gtagggtctt ataatacatc taacttgtca caaccaaagc | 120 180 240 |
| agcttgaaat aacgtccgat gagaaattca gagaagctca cacggaagtc tctcgagata | tgaacaactt tcacgcgcat aatgttcata aaattgagca tgattcatgc ttcaaatggt | aatatatcga acttgtcaca acgaatgctc gcataatata | gacactccaa cgaaagttca tcgtgaaatt tcgagacgct tacacggaag | attgaacaac attcaggcac cacatggtca cgaaattgaa | gtagggtctt ataatacatc taacttgtca caaccaaagc | 120 180 240 300 |
| agcttgaaat aacgtccgat gagaaattca gagaagctca cacggaagtc tctcgagata tatcgagaag <210> <211> <212> <213> | tgaacaactt tcacgcgcat aatgttcata aaattgagca tgattcatgc ttcaaatggt ctgaaattga 5997 429 DNA Glycine max | aatatatcga acttgtcaca acgaatgctc gcataatata cataacgtgt caacgacgct | gacactccaa cgaaagttca tcgtgaaatt tcgagacgct tacacggaag | attgaacaac attcaggcac cacatggtca cgaaattgaa | gtagggtctt ataatacatc taacttgtca caaccaaagc | 120 180 240 300 360 |
| agcttgaaat aacgtccgat gagaaattca gagaagctca cacggaagtc tctcgagata tatcgagaag <210> <211> <212> <213> <400> | tgaacaactt tcacgcgcat aatgttcata aaattgagca tgattcatgc ttcaaatggt ctgaaattga 5997 429 DNA Glycine max 5997 | aatatatcga acttgtcaca acgaatgctc gcataatata cataacgtgt caacgacgct | gacactccaa cgaaagttca tcgtgaaatt tcgagacgct tacacggaag ctctag | attgaacaac attcaggcac cacatggtca cgaaattgaa tccgattctg | gtagggtctt ataatacatc taacttgtca caaccaaagc ggccataata | 120 180 240 300 360 396 |
| agcttgaaat aacgtccgat gagaaattca gagaagctca cacggaagtc tctcgagata tatcgagaag <210> <211> <212> <213> <400> tgagattgaa | tgaacaactt tcacgcgcat aatgttcata aaattgagca tgattcatgc ttcaaatggt ctgaaattga 5997 429 DNA Glycine max 5997 caacagaagc | aatatatcga acttgtcaca acgaatgctc gcataatata cataacgtgt caacgacgct | gacactccaa cgaaagttca tcgtgaaatt tcgagacgct tacacggaag ctctag | attgaacaac attcaggcac cacatggtca cgaaattgaa tccgattctg | gtagggtctt ataatacatc taacttgtca caaccaaagc ggccataata cacacgaagt | 120 180 240 300 360 |

| attcaaatgg | r tcataacttg | r tcacacggaa | gtccgattca | ı ggcgcataat | atatcgagac | 180 |
|----------------------------------|-----------------------------------|------------------|------------|--------------|------------|-----|
| gctcgaaatt | gaacaacgga | tgcactcaag | aaattcaaat | ggtcataact | tatcacacgg | 240 |
| aagttcgatt | cagacgcata | atatatcgag | aagctcgaaa | ttgaacaacg | gaagctgtcg | 300 |
| ataaattcaa | atggtcataa | cttatcacac | ggaagtccga | ttcaggtgca | taatatatcg | 360 |
| agaagcttgg | aattgaacaa | cggaagccgt | cgagaaattc | aaatggtcat | aacttatgac | 420 |
| acagatgtc | | | | | | 429 |
| <210> <211> <212> <213> | 5998 377 DNA Glycine ma | x all n locat | ions | | | |
| <400> | 5998 | | | | | |
| agcttagcag | ncacttgttg | tcctccatcg | ttatcctgat | caccgtgaaa | gtcctcaaca | 60 |
| accactctgt | catgcacctt | atacagagca | tcctgagccg | gagacacata | attgcctcca | 120 |
| ccctcaacag | cattagtctc | atcactgaga | ccataaatag | taacaacgcg | ctcttcgcac | 180 |
| cccggcacag | tctcaccaat | cctaatctta | gccttagtct | ccaccctcag | ttgcttaaca | 240 |
| atctcacctc | ccctaccaat | aacactgcca | atctttcgac | ccgggcacac | ataacgatac | 300 |
| acggtatcct | ccgaatcaat | cacaaactgc | tctctatcat | caccatgatt | cctcctttta | 360 |
| attggcccat | tatcatg | | | | | 377 |
| <210> <211> <212> <213> | 5999 371 DNA Glycine max | ς . | | | | |
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| ctaatgagtg | ctatttttac | tgggactatc | tactatctta | agcgggactt | ggcattctaa | 60 |
| atagatgttg | gaaaggatat | attcaccctc | tacaagaggg | agtctggtga | gcattttcaa | 120 |
| aaggtaatct | ttttggggaa | ttttatcaca | gaccacaact | gtgatagcca | ttattatgct | 180 |
| ttgagatgct | acagttttga | cgtcttagtt | cctttgtccc | acatacgttg | gtttgtaaaa | 240 |
| atgtgtctc | attagtgtta | tatatagaga | cactcgcaag | ctgtagatgt | gcactaataa | 300 |

| tacagttttt | aagtgtacca | tggacgtagg | ccactaatca | cagaggctaa | atggagattt | 360 |
|----------------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| ttaatattgo | t | | | | | 371 |
| <210><211><212><213> | 6000 378 DNA Glycine max | | | | | |
| <400> | 6000 | | | | | |
| agctttggcc | aaaccccagc a | agcagttgtt | tccttagaga | cttgccttag | caccttgtct | 60 |
| ttgagactga | ggataattac a | actgtgtgcc | ttttgcagta | gtgctttctt | atccccatca | 120 |
| gccatcatct | tttcaagttt g | ggcttctcca | tcaagtgctt | ccaccaggcc | ctgctgaaca | 180 |
| agaagagctc | tcatcttcaa t | cgccataac | ccaaaatcat | tttgccctgt | gaatttttca | 240 |
| acctcatact | tggccgagtc c | catttcttga | atcgaactca | aaaatcgctc | cacgctcacc | 300 |
| gcaccaattt | gttgtgccaa g | gatcagattt | tagttcacaa | aagaatgagt | ttcttgtatg | 360 |
| aacaagaata | agcaaaat | | | | | 378 |
| <210> <211> <212> <213> | 6001 379 DNA Glycine max | | | | | |
| | | atmanttan | 2021200021 | tatante | | |
| | gccatgtttg g | | | | | 60 |
| | tgatgtttat a | | | | | 120 |
| | ctacggttag a | | | | | 180 |
| • | tggaaggtta g | | | | | 240 |
| tactagettg | aaatgtcatt t | atgacttat | gagaaagctt | ggactgtgct | agagagaaaa | 300 |
| acaaatgacc | aaagtgaacc a | agagccatt | tctagggcaa | aattgggtgt | tgaggagtca | 360 |
| aactttgatt | cggtagaaa | | | | | 379 |
| <210> <211> <212> <213> | 6002 399 DNA Glycine max | | | | | |

| <400> | 6002 | | | | | |
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| agcttgccca | gtctagctag | gttgcttcct | ccaaaacaac | : cgccttctgg | aggaacatcc | 60 |
| tggaaggccc | aagtgggcct | ggtttctatt | tgcacccctt | tttttactaa | atacacccca | 120 |
| tttgcttttt | tggtgattct | ttttccgtaa | agatacggaa | acttatgaat | ttcgtaacga | 180 |
| tacttgttct | cttttcgtaa | tgttgtggaa | ccttacagat | tacataatca | tccctttttt | 240 |
| gccttccgaa | acgttatgga | actttacgga | ttgtgcatta | acacttcctt | ttaattttcg | 300 |
| gcatgtcacg | gaacttcacg | gattgcgctc | aacgcttttc | ttttgtcttc | cgcatgtctc | 360 |
| gaatcttcac | aattgcctaa | ccatgggtgc | caatacctc | • | | 399 |
| <210> <211> <212> <213> <400> | 6003 337 DNA Glycine max | ς . | | ė | | |
| tgtatgtgaa | aggatgtgac | tcttcacatt | tgaatttgaa | tttcaacatc | caaaggcact | 60 |
| ggttatcgat | taccaaaata | ttgtaatcga | ttacaacttt | ttgaaattaa | ttggatcgtt | 120 |
| gataattcaa | tttgaaaaag | ttttcaaaac | aactttacta | ctggtaatcg | attacaacaa | 180 |
| tctggtaatc | gattaccaga | gagtaaaaac | tctctggtaa | acatgtattg | agaataatca | 240 |
| tgtgctactc | aattattgag | acaaactctt | catacttatc | ttgattaagc | cttttcttga | 300 |
| ttcttgaatc | ctgatcttga | ttcttgagat | cttgaac | | | 337 |
| <210> <211> <212> <213> | 6004 410 DNA Glycine max | | | | | |
| <223> <400> | unsure at a 6004 | ll n locati | lons | | | |
| agctntgccg | atttagtttt | catcggcgaa | aggatcgaag | tgggtttgag | aagaggaaaa | 60 |
| tctgattatc | ctgctttgat | gaatgggaag | cctatggcaa | atggagagaa | taagaatgag | 120 |
| ggaggaaccc | atgctgtgac | tatcgttcct | atatggccaa | atttcccacc | agctcaacaa | 180 |
| tatcaatact | cagccaatat | cagcccttct | cattacccac | caccctatca | gccaagaaca | 240 |
| ctcaatcatc | cataaaggcc | acccctatat | cagccacaaa | gcctgcctgc | tgacatccga | 300 |

| tccaaacacc | acccttacac | aaatanaaca | ccaactagga | ggaatttcta | gaaataacct | 360 |
|-------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| aagaattacn | ccattccatg | , tatatgctgc | ttactcccta | ttactcatat | | 410 |
| <210> <211> <212> <213> | 6005 338 DNA Glycine ma | × | | | | |
| <400> | 6005 | | | | | |
| tcgtgctcag | atccctcttg | gtggactagg | cttaatttat | acagecetee | taggtttaga | 60 |
| ctaacttaaa | ctaagcttca | tcctcagatc | cctcttgttg | gactagactt | agcataaata | 120 |
| gcttacgaaa | gtttagacta | atttagccta | agctttgtcc | tcagatccct | cttgttggac | 180 |
| tagacttaga | ccaaacaaca | ttattgtaac | aacacattta | aaaccaaaac | ttaatccaca | 240 |
| gatccctctt | gaagactaag | tttcaattat | gcttcattca | agttctaagg | aaacaataca | 300 |
| ttttccaatg | ctaaaatcac | ctaaccagac | acacaaat | | | 338 |
| <210> <211> <212> <213> <400> | 6006 351 DNA Glycine ma: | x | | | | |
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| ggactgaacc | accaacttgt | ttgacaagat | cctcacacca | cgacttgttt | ggagtcatat | 120 |
| gaaacgaaca | cccacagtcc | aagatctatt | tgtctcagtg | ttcttatgag | acaccattaa | 180 |
| agcctcagct | gaatcatatc | catcttcaac | tagagtagca | tttccaggct | ctttagatcg | 240 |
| atcttgctcg | attcctttct | gtctattacg | acagaactct | tcggtatggc | ctggtctttt | 300 |
| acacgtggta | catctaatgt | ttgtacatta | catccatacc | gagttggtga | С | 351 |
| <210> <211> <212> <213> | 6007 403 DNA Glycine max | ς. | | | | |
| <400> | 6007 | | | | | |
| | | | | | | |

| gaataagtgg | gcaccaccat | tccataccat | tatagagaat | caaataatat | atatatcctc | 120 |
|-------------------------------------|--------------------------------------|------------------|------------|------------|------------|-----|
| agaatctcat | taagtcattt | ttattgatac | gaactgtata | taagtattaa | caaatttatc | 180 |
| agacttccgc | gccatacttg | actaagttat | aagataacct | ataggatgct | attactttgg | 240 |
| agataggaaa | tccgatgctg | aactttagat | gataaagaga | taaactttct | catattatcg | 300 |
| gttccgaaaa | ttagcgcgtt | gagttttact | aaatgacgac | atcctagaac | atatccattc | 360 |
| aagcacattg | gtggaattat | atcatacgct | gatataagca | aat | | 403 |
| <210> <211> <212> <213> <223> <400> | 6008 449 DNA Glycine max unsure at 6 | x all n locat | ions | | | |
| tgcacacaag | caagtcccat | ttgattaaga | tcagtaccaa | atattgcaga | tttcttctcc | 60 |
| ccagtagcac | gaagcttcga | cacagcattc | ttgaaagtat | tgtaagattc | agtgtagttc | 120 |
| tccaacacgt | agtacatgac | tcccatctga | gcttcaatac | cagctattgt | gttttgctga | 180 |
| ccagaggctt | cattaagtat | ctctagtgcc | ttgtgaagta | acttaagtgc | ctgttctagc | 240 |
| tcattcattg | actcataaat | ggctgagaca | ttcataaaac | cactagcaac | ctcctctgga | 300 |
| gggaccccag | gcatgggatt | ctcatagatn | ntaagtgcac | tctcacaata | tgattttgat | 360 |
| tcccttatct | tccatgtcct | gcaatacaag | tcagcaaggc | gtacaaagac | tgatcccaca | 420 |
| gaaggatgat | tctcaccttt | gtgagtcct | | | | 449 |
| <210> <211> <212> <213> | 6009 464 DNA Glycine max | ι | | | | |
| <223> <400> | unsure at a | all n locati | ons. | | | |
| ccgattcgga | tcgatgaatg | aaatcctctc | atgcaagtac | aatattggag | ctaaatcttc | 60 |
| ctcggaatga | ttagtcgttt | atgaattata | agatgagaaa | ataaaattat | caaatgtaaa | 120 |
| aagttttacg | taattattca | attgtaagat | tttatatata | ttaaatttat | taatttttaa | 180 |
| aataattatc | ttaaaataat | ttaaataata | atttataatt | aaataataat | ataaaattat | 240 |

| tttattctgt | tataataatt | acacttaggg | catcttgaca | tatgcttcaa | actttcaact | 300 |
|----------------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| cctaatttaa | ttntgcttga | actttaactg | ccagccatac | acgattctta | gtacggctaa | 360 |
| gggatatatt | ctgtaccgcc | aaaagcccaa | acccccttg | aattattgat | tatntatttg | 420 |
| cgccaatttt | tgttggactt | ttatgcaaga | ttactggttg | agcc | | 464 |
| <210> <211> <212> <213> | 6010 302 DNA Glycine max | c | · | | | |
| gcttgcttct | acacttccac | ttgccaatag | tttataggac | taaccgcctg | agatatettt | 60 |
| • | tacaaagatt | | | | | 120 |
| | atcctttgtg | • | | | | 180 |
| | gggtacatct | | | | | 240 |
| | aacaagggag | | | | | 300 |
| aa | | | | | | 302 |
| | | | | | | |
| <210> <211> <212> <213> | 6011 134 DNA Glycine max | : | | | | |
| <400> | 6011 | | | | | |
| tgccacccag | ctcgcccaag | cgagcagggt | tgcttcctcc | ataagcaaca | gccttctgga | 60 |
| ggaatcttct | ggagggccca | agtgggcctg | gttgctattt | gcacccccat | ttttactaag | 120 |
| gacaccccct | gcct | | | | | 134 |
| <210><211><211><212><213> | 6012 432 DNA Glycine max | | | | | |
| <223> <400> | unsure at a | ll n locati | ons | | | |
| agcttttgcc | tcanaacgca (| ttgtttccaa | catccaaggc | tctggtaatc | gattaccaga | 60 |

| | agagaatttt | gaagcaaagg | gtttaaaaag | ggttttgaat | ttgaattttg | agtcatgtaa | 120 |
|---|----------------|-------------|--------------|------------|------------|------------|-----|
| | | | | | _ | | 140 |
| | tcgattacta | gatgtttata | atcgattacc | agtaatgaca | ctttagaaaa | cactttggaa | 180 |
| | agacatgacc | cttcaaaata | taattgtgta | attgattacc | agaaatctgt | aatcgattac | 240 |
| | cagtgaataa | ttttagaaaa | atctttttga | aaagacacat | ctcttcaaac | cattttgaaa | 300 |
| | aggcacgaag | ggcctatata | tatgtgtgtc | tgacttagaa | aagcaagaga | gagatattct | 360 |
| | aagagaacat | aattgccaaa | ttctctctca | acaactcctg | ggcaaacact | tganaatcta | 420 |
| | ttgataattc | at | | | | | 432 |
| | | | | | | | |
| | <210> | 6013 | | | | | |
| | <211> | 450 | | | | | |
| | <212> <213> | DNA | _ | | | | |
| | <213> | Glycine max | • | | | | |
| | <223> | unsure at a | all n locati | ons | | , | |
| | <400> | 6013 | | • | | | |
| | ngaagaggat | gctntaatgg | aggagaagaa | agagagaagc | atggagcacg | aaattgaagg | 60 |
| | | | | | | | |
| | aataaaagag | ggaaagaagt | ggaactttga | agtgtatctc | ataagacttt | cattcatcca | 120 |
| | aagttacaac | aagtgttaca | catgcttcta | tttatagact | aggtagcttc | cttgagaagc | 180 |
| | tttcttaaga | aaacttcctt | gagaagcttc | tttgagaaaa | cttccttgag | aagctagagt | 240 |
| | ttagctacac | acacccatct | aaaaactaag | ctcacctcct | tgagaagctt | ccttgagagg | 300 |
| | ctagagctta | gctacacacc | cctataatag | ctaagctcac | ccccatgaca | aaaaaacatg | 360 |
| | anaatacaaa | aaaaatccta | ctacaaagac | tactcanaat | gccctgaaat | acaaggctaa | 420 |
| | aaccctatac | tactagaatg | gccaaaatac | | | | 450 |
| | , | | | | | | |
| | <210> | 6014 | | | | | |
| | <211> | 431 | | | | | |
| | <212> | DNA | | | | | |
| | <213> | Glycine max | | | | | |
| | <223> | unsure at a | ll n locati | ons | | | |
| | <400> | 6014 | , | | | | |
| | agctntaagg | ctaagtcttc | atottoctca | tattatttaa | ctatctctan | cagtocatoa | 60 |
| | | | | | | | 00 |
| | tcaatcactt | tcaagatccc | ttggatttat | aaaggtgcat | aataatatca | tggacccttc | 120 |
| • | cttattataa | catctcctca | tttttgtctc | ttcctctccc | aacgccctta | atggaagctc | 180 |

| taatgacgac | tccaatgaca | cctccaacat | gagcaatccc | caactgccac | cgcacacttc | 240 |
|-------------------------------------|--|-------------------|------------|------------|------------|-----|
| tccttcctcc | tccgtccaaa | aacaaagtta | acacaaaagc | atagtgacat | tgctaaactc | 300 |
| accaaaccaa | caaatccaca | atgcatgata | acaaatagaa | tatattaaat | ttcaaaacgc | 360 |
| atgaacacat | gaaggttggg | cattaatgga | gtacaaagtt | gttcacaata | ccataaacca | 420 |
| aatttatctg | a | | | | | 431 |
| <210> <211> <212> <213> <223> <400> | 6015 451 DNA Glycine max unsure at a | x all n locat: | ions | | | |
| | | | | | | |
| | | | aaagtgtttg | | | 60 |
| | | | tattcattgg | | | 120 |
| aatgcacatt | ctctccatgt | tgaaacgcca | ctctctttag | ctgtcttgaa | ccacacttca | 180 |
| gcaaaggtca | acatgttgtc | gcttagaaca | gttctaatca | caaçaggtgt | agaccacgtt | 240 |
| gtttgagatg | aagaaagatg | ttgttctttt | aagacttgaa | tatcctctta | ctttcttgga | 300 |
| cttcgaaaaa | tcttagaaaa | aaaatttcaa | gacattctca | gcagaataga | tctcagacac | 360 |
| aaagcattaa | tgaagtctta | aatgcttatc | atagcttaac | atttgttngc | ttctttctaa | 420 |
| tctttcaaac | gcatatgcaa | aacaacaatt | С | | | 451 |
| <210> <211> <212> <213> | 6016 433 DNA Glycine max | ς | | | | |
| <400> | 6016 | | | | | |
| agcttgccac | ccagctcgtc | ctggcgagca | tggttgcttc | ctccagaagc | aacagccttc | 60 |
| tggaggaatc | ttctggaggg | cccaagtggg | cctgattgct | atttgcaccc | ccatttttta | 120 |
| ctaaatacac | cccctgcctt | tttttggtga | ttctttttc | gtaaagttac | agaaacttac | 180 |
| gaatttcġta | acgatacttg | ttttctttcc | gtaatgttac | ggaaccttgc | ggattacata | 240 |
| atcatcccct | tttttgactt | acggaatgtt | atggaacctc | actaattgtg | caacgatgct | 300 |
| | | | | | | |

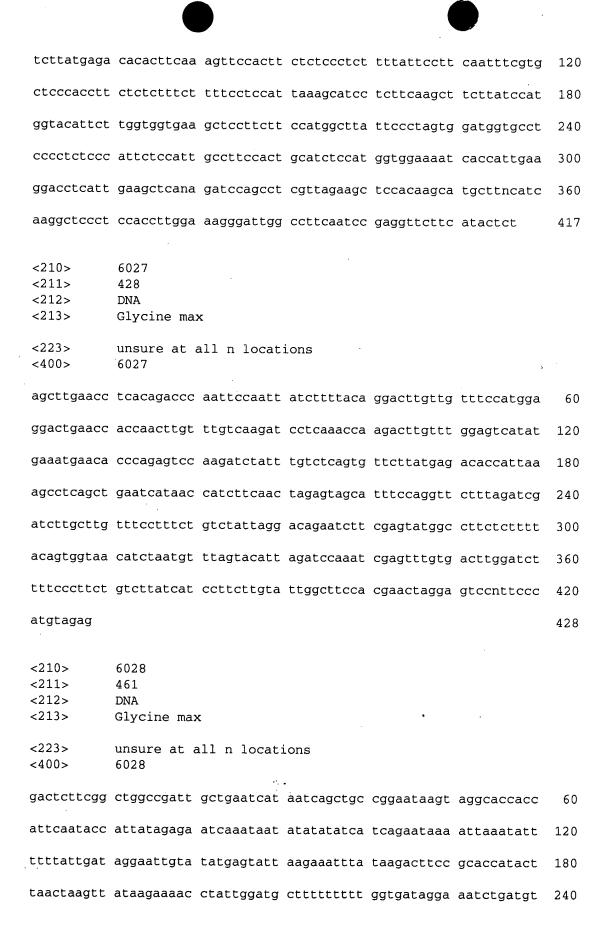
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| atttccgcat | gtcccggaat | ttacaaattg | cctaatgatg | ggtgccaagc | acctcacaag | 420 |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| gaccaaacaa | aag | | | | | 433 |
| <210> <211> <212> <213> | 6017 387 DNA Glycine max | ĸ | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| taactatgct | agtataatta | ttttgtgtca | ttaatctttc | tccttttaaa | ctccattcgt | 60 |
| gcaactagat | atatgtgcga | ttcaatcctt | gttcaattaa | tcttgcatta | cataatttaa | 120 |
| aagggttttt | caagttgttt | ctcaatataa | ttactttgat | aaatggttct | aaatttatcc | 180 |
| tatataaaga | aaggtgtgaa | aagtttgttt | ttgaaaaaga | gataaagatt | ttgaaaatat | 240 |
| atattcacct | ccctctctaa | atcaatctac | atggatcaac | atagttgcta | tcgagttgtc | 300 |
| aaactagaat | cttgaanatt | tgaaggttga | gtggtacatc | ctatttttcg | taataaatta | 360 |
| aaaagctttt | tagtaaaaaa | taaataa | | | | 387 |
| <210> <211> <212> <213> | 6018 416 DNA Glycine max | ς | | | | |
| <223> <400> | unsure at a 6018 | all n locati | ons | | | |
| agcttacaaa | tatgtgctat | atccaagccc | ataagttatä | tcaaatcaca | tctagataag | 60 |
| ataagatacg | ataagatcta | attttataga | ataaattagt | ctgccctctt | caagtccaag | 120 |
| cccaattcta | gattcaagcc | caatgctaga | ttcaagccca | atgcttcatt | aattcctgaa | 180 |
| attagattaa | aaacatcaaa | ttggctgaat | gggcccaaat | aataaaactg | cctaattaat | 240 |
| tgacaattaa | gaccaatcaa | taattaaaat | ggtgcaaaaa | gggtttagaa | aatagaagat | 300 |
| natgatggca | catcaaaacc | ccccatactt | agccttttgc | actcctgtgc | gaaatgaaac | 360 |
| atagaacaag | aactaaatcc | aaggatatca | gagggagaca | aacaaataca | ttcaca | 416 |
| <210> | 6019 | | | | | |

| <212> <213> | DNA Glycine max | x | | | | |
|-------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| <400> | 6019 | | | | | |
| tctgagtgaa | acaatgcgac | tattcactat | tcaattagaa | tttcaacgtt | caaggacact | 60 |
| ggtaatcgat | taccataaca | ttgtgatcga | ttacagcctt | ttgaagatat | ttggaacgac | 120 |
| gcacatttag | tttgaaaact | ttttcacact | cattgtgcta | ctggtaatct | attacaacaa | 180 |
| tatggtaatc | gattaccaga | gagtaaaaac | tctttggtaa | acgctttgtc | aaaaactcat | 240 |
| gtgctattca | aggatatgaa | aaaactttat | aatacttatc | ttgaatgagt | cttttcttca | 300 |
| ttcttgaatc | ttgaggcttg | agacttgaac | ttgattcttg | agatcttgag | acctgatgct | 360 |
| tgagtctagg | ctttcttctt | gagtcttcga | atctccttga | | | 400 |
| <210> <211> <212> <213> <400> | 6020 355 DNA Glycine ma: | x | | | | |
| agcttgcaat | gaaagatatt | gtgtatgtag | gagtctggtg | tcaatctaga | cacacaaacc | 60 |
| aaggccataa | ttcaaaatag | gtaagataga | aatgatgata | gtcattggca | caaatattga | 120 |
| cttctgcaac | tgctactaag | cttgcaatca | aagatattgt | atatatagta | atgaactttc | 180 |
| cattcagtaa | cacaaatttg | ttttatttgt | acgcttaaat | ctgctagatt | gtctgttcaa | 240 |
| cttgaaatct | caaatttcta | tcttacatct | tttatttggc | aatatgtaac | aaaagatgca | 300 |
| acacataagt | ttactaaatg | ttacatcaga | gatgggcatt | agttgtttat | atatt | 355 |
| <210> <211> <212> <213> | 6021 437 DNA Glycine ma | | | | | |
| <223> <400> | unsure at 6021 | all n locat: | ions | | | |
| gggttagagg | tacttacccg | ttgaatactg | aagacaacga | tgaacgaacg | atgaatcttg | 60 |
| aagaacggtc | gagaatcttc | gcgtaattac | tcacggaaac | gttacagaag | cgcctcagct | 120 |
| tggattttct | tcacggaact | aattatcctc | aacaatttcg | agagagagag | aagtgcctaa | 180 |

| ggggctgaac | ctttttcttc | ttcacttctc | cccctattta | tagcanaata | ggggagaagc | 240 |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| ttgccgccca | gctcgcccag | gcgagcaagg | ttgcttcctc | cagaagcaac | agccttctag | 300 |
| aggaatcttc | tggagggccc | aagtgggcct | ggttgctatt | tgcacccctt | ttttactaag | 360 |
| tgcacccncc | ttctattttt | ntggtaatct | ttttccgtaa | cgttacgaaa | ctttacgaat | 420 |
| ttcgtaacga | tacttat | | | | | 437 |
| <210><211><212><213> | 6022 354 DNA Glycine max | ς | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| agcttacagc | tttgtcgagc | tattctgcta | ttgcacagat | atgtatatct | atatccaaac | 60 |
| gcgatatata | ggaacatgaa | atacaactta | gcaggattaa | cttaagtata | ataacatgtt | 120 |
| cttttacttt | tatataatta | gaaattattt | tgtacatcga | ttaataatta | cttataaata | 180 |
| cagataaaat | ataccaaaat | atagatttga | aaagcatttt | aagaaaatac | tagcttattt | 240 |
| actaaacata | tgtgagaaga | tccataatta | catgagaaga | gtatttntca | ctctcaagaa | 300 |
| catgaagaga | cggacttatt | aaatagataa | acaagtttta | atatatctat | gttg | 354 |
| <210> <211> <212> <213> | 6023 375 DNA Glycine max | | | | | |
| <400> | unsure at a 6023 | II n locati | ons. | | | |
| ntagcgaaac | accattgtga | gcgaggaggg | aatgcaacat | tattttggat | ttggaacacg | 60 |
| caattgtgac | caccaacgag | gcattntaaa | ataccaggga | tgcctgtttc | gcatatactg | 120 |
| ctggcgaaac | cagcatggct | catttcgcca | ctactgctgg | cggcaccctg | ttgctcctgc | 180 |
| ccctctgcg | tgcctagact | gcagcctcta | cgcccctaca | ctggcctact | gcaatgtatt | 240 |
| gctagtttga | ctggcgaaat | aactgaggtt | actttgcaag | tgccagtggc | gatttcactg | 300 |
| ccacgtggcg | cgtcgcatgc | atgtttcgcc | aacatgcatg | gcgagttacg | ttaaacacgg | 360 |
| accctcgcgt | aattt | | | | | 375 |

| <210> <211> <212> <213> | 6024 436 DNA Glycine max | |
|----------------------------------|---|------------------------|
| <223> <400> | unsure at all n locations 6024 | |
| agcttcacaa | a tatttcagaa gtctaaacat gcactgttgc gtaatttata aagtt | ttgta 60 |
| gcattccgga | a agtcaaaaca agcattgttg tgtaatctgt aaagtttcac aacat | tccga 120 |
| aaggaaaagc | c aagaategtt aegtaateea taaaeeatag aaeetgtaaa gttte | ggcag [.] 180 |
| gttttagaaa | n gaaatcggca gaataacaca aaagggggtg tatttagtaa aatgg | gggtg 240 |
| taaataacaa | a ttttcaaatc tgggcccttc tagaggattc tagacctttt ctttc | tcctt 300 |
| ggctaagcaa | a ccagettgee tgggegaget gtgeggeaag caeeteeaeg ttntg | ntgaa 360 |
| naatggtttc | tgggacttcc gtaatgcttc cgtaaaattt ctgaaaaact tgggt | acgca 420 |
| tgtttcactt | aataat | 436 |
| <210> <211> <212> <213> | 6025 246 DNA Glycine max | |
| <400> | 6025 | |
| accattatcg | actecetttt tgeacatgtt etgtagttge atectateca gaacea | atatt 60 |
| agaatagtac | tgatactgcc taacgaaagc aaccattaag tccttccaag tatgga | actcg 120 |
| ggaaggttcc | aagctagtgt accaggtaac aactacccca gtaagacttt cttgg | aagaa 180 |
| atgtattagc | agatecteat etttgegtat gececeatet tetgacaata eatett | ttata 240 |
| tggttc | | 246 |
| <210> <211> <212> <213> | 6026 417 DNA Glycine max | |
| <223> <400> | unsure at all n locations 6026 | |
| agctntctaa | totataaata gaagcatgtg taatacttgg tgaactttga tgaatc | 7222G 60 |



| | tgaagtttag | atgaaaaaaa | gtaaaacttt | ctcatattat | cggctaggaa | atttaatggt | 300 | | | |
|---|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|--|--|--|
| | ttaaattgta | ataaatgacg | acatacaaga | acataaataa | taaaaaacat | tgcaaaaatt | 360 | | | |
| | atatcatacg | ctgagataat | taaatntgtt | gagataacta | atanaacata | gattattcca | 420 | | | |
| | aaatacacac | attgctaaga | atattatatg | ctaatagaaa | a . | | 461 | | | |
| | <210> <211> <212> <213> | 6029 402 DNA Glycine max 6029 | | | | | | | | |
| | agcttcaatg | tccctgttca | catcttcaac | ctctttatca | agcttatctg | acaaaatcct | 60 | | | |
| | catgcagtca | aggcatgaag | gctgttcaac | ctgtaaccac | aaacagaaaa | catagattat | 120 | | | |
| | gacccaatca | cctaaaaacc | tatcaaatac | attacataat | acatatttac | atgtttcctc | 180 | | | |
| | catccacaaa | cctgcatctg | cgtcgtggca | atctcaaatg | ctcgagtcag | gacagtaata | 240 | | | |
| | gtagaattaa | acccagagtt | atgaggtggc | aaatggccac | cagaatcagc | ccctgtgccc | 300 | | | |
| | gacgaatgca | ccgcgtttcc | atcggtcccc | gattcggact | tgtacacaac | cacaaacgac | 360 | | | |
| | tcctccatgg | ccttccctgg | ctgtgcagca | gcatcgccgc | gt | | 402 | | | |
| | <210> <211> <212> <213> | 6030 412 DNA Glycine max | ζ | | | | | | | |
| | <223> <400> | unsure at a 6030 | all n locati | ions | | | | | | |
| | actaaccttc | tgaacgggat | catatattca | ttggcataga | ttaatgtatg | aagatgtggt | 60 | | | |
| | acgtgatatc | ttttggtgtc | accctgatgc | agtgaagtta | gtcaatgcat | gtaatttggt | 120 | | | |
| | gtttttcgta | gacagtacct | acaaaacaaa | caagtacaga | ctcccactac | ttgattntgt | 180 | | | |
| | tggggtgaca | ccaacaagga | tgacattctc | tactggtttt | gcatatctgg | agagtgaacg | 240 | | | |
| | tcttaataat | gtggtatggg | ctttagtgtt | ggatcaagtg | gcctcggaat | aattaagaag | 300 | | | |
| • | ggggggttga | attaattatt | attgaaactt | tactaattaa | aaatctaccc | ttcttaggct | 360 | | | |
| 1 | tttactatgt | tgttaagaaa | gttaagaaca | gaaatattaa | cttaaccaaa | ag | 412 | | | |

| <210> <211> <212> <213> | 6031 433 DNA Glycine ma | ıx | | | | ٠ |
|----------------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| <400> | 6031 | | | | | |
| agcttataag | aacaaaattg | ccttaatcat | ttccaaatat | gcatgtgaat | taggacgcat | 60 |
| caacaagaat | caagccaagg | ctattgtgca | agcaatcaat | ggggcaaaac | acaccaaatg | 120 |
| attataatga | tggatggctc | aaattctcac | aaaggtaaaa | tcatcacttt | caaattgagc | 180 |
| tttcaaaact | atcatgacat | gtagagaaga | atcaaggatt | tcaagtcaca | aaatgtcaag | 240 |
| aacttttatt | tcgaaacaat | tacccatttc | ttgaacatat | cctataattc | aaagaaaaac | 300 |
| atgcaaagtc | gtacgtgcac | acaaaattga | cccaaaatat | taaactgaaa | atccgacgaa | 360 |
| actaacaaca | ttaacaaatt | aacacaacta | acaaattaac | aaaaccaaca | aaactagcaa | 420 |
| aaccaaagaa | cac | • | | | | 433 |
| <210> <211> <212> <213> | 6032 345 DNA Glycine ma | x | | | | |
| <400> | 6032 | . • | | | | |
| agctttcgtt | ttcaattacg | agcgactcga | tatcctacgg | gactcaatcg | gacatccgag | 60 |
| tgaaaagtta | ttgtcgtttg | aatttactca | gagcttccgt | tttaaattac | gagcgtctcg | 120 |
| atattctacg | ggacacaatc | ggacattcga | gtcaaaagtt | attgtcgttt | gaatttgctt | 180 |
| agagctttag | ttctcatttt | cgagcgtctť | gatatattac | agggctcgat | cagacatccg | 240 |
| agttaaaagc | tattgctgtt | agagttttct | cagagcattt | ggtttgaatt | acgagcgcct | 300 |
| cgatatccta | cgggacacaa | tcggacatcc | gagataaatg | tattg | | 345 |
| <213> | 6033 379 DNA Glycine mas | < | | · | | |
| tgcatttgga | attgcgaaag | cccactcca | tcattaggat | tagtacctga | catctcaaac | 60 |
| aaacaaatca | aacgtaacaa | gacaattata | gttgctgttt | gaatctcacc | cactcaagtg | 120 |

| tatcacacaa | ttatggcttt | tctctaatga | aacactcttg | ccttttacca | ctctaattcc | 180 |
|----------------|-------------|--------------|------------|------------|------------|-----|
| ccttgagttc | ttatgtaatt | caagagatta | tggccacaac | aaagaacaat | tcaccaatat | 240 |
| gtgtaaggta | aggctagaga | gacaaggaaa | aggttaacca | agataaaggc | taacaatgtt | 300 |
| tttaggcaca | aatgaaggag | ataaaattca | gaatttatga | attcaagtaa | caatccttca | 360 |
| tgccaccaat | atattacct | | | | | 379 |
| 21.0 | 500. | | | | | |
| <210> | 6034 | | | | | |
| <211> | 401 | | | | | |
| <212> <213> | DNA | | | | | |
| <213> | Glycine max | x | | | | |
| <223> | unsure at a | all n locat: | ions | | | |
| | • 6034 | 21 11 10cac. | 10115 | | | |
| | | | | | | |
| agcttataag | aacaaaattg | ccttaatcat | ttccaaatat | gcatgtgaat | taggacgcat | 60 |
| caacaagaat | caagccaagg | ctattgtgca | agcaatcaat | ggggcaaaac | acaccaaatg | 120 |
| attataatga | tggatggctc | anattctcac | aaaggtaaaa | tcatcacttt | caaattgagc | 180 |
| tttcaaaact | atcatgacat | gtagagaaga | atcaaggatt | tcgggtcaca | aaatgtcaag | 240 |
| aacttttatt | ttcaaaacaa | ttacccattt | cttgaacata | tcctataatt | caaagaanaa | 300 |
| catgcaaagt | cgtacgtgca | cacgaaattg | acccanaata | ttaaactgaa | natccgacga | 360 |
| aactaacaac | attaacaaat | taacacaact | aacaaattaa | C | | 401 |
| <210> | 6035 | | | | | |
| <211> | 414 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine max | • | | | | |
| | - | | | | | |
| <223> | unsure at a | ll n locati | ons. | | | |
| <400> | 6035 | | | | | |
| | | | | | | |
| ggtacccatc | acatgtggta | ctatgtggtg | gtcgggcgat | ggtgcacaac | aagttttcca | 60 |
| catccacaat | acacacataa | 200020020 | acatatta | | | 400 |
| Cacccacac | gcgcgcataa | acceaceate | ccctgttgcc | cacctccaac | tgagctcacg | 120 |
| tactcccacg | tagcccatat | cctcgtttct | ctcaacaccg | ggtccccatc | aatcctccca | 180 |
| agcnttccca | acatcaaagt | aatacaacat | tcaaacagca | caaactatca | cagccaagaa | 240 |
| | | | | | | |
| | aggcagaaaa | | | | | 300 |
| tcaaagaccc | cagtaacaat | tccttcgatc | caattcgtaa | accgttggat | cgactncaaa | 360 |

| attttactgg | aagtctatag | tgcataagcc | tacattttga | ccgtgggatc | tact | 414 |
|---------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| <210><211><211><212><213> | 6036 429 DNA Glycine max | S | | | | |
| <223> <400> | unsure at a | ill n locat: | ions | | | |
| agcttccctt | atcgatattg | ccgtatgcat | tacttaacat | cagtataaac | aagagatgtc | 60 |
| agtggatctt | aggtattcca | cctttccatc | aagcattaat | gccttttttg | gagcacatgc | 120 |
| attaatatct | gattaacatg | tgttcatgct | atttgtagaa | aattgtatat | cattgtacat | 180 |
| tgtatcaata | tttttctcaa | gattctctag | atacttttct | caagacatca | cgattgacaa | 240 |
| gtcacaagta | tacacaattt | ataaaaaaaa | tggtgaaagg | catcggagga | aaccgaanaa | 300 |
| gttacctaat | agatggacat | tntatacagt | cttcaggtct | aggagttggt | ggcactcgac | 360 |
| aatataaaaa | acctgttaat | gtcaaagcat | atgcagccac | ttttcccaga | agtagcaaaa | 420 |
| catttgtag | | | | | | 429 |
| <210><211><212><213> | 6037 401 DNA Glycine max | | | · | | |
| <223> <400> | unsure at a | ll n locati | ons | | | |
| ngaacttgcc | tgctaagcga (| gagtgcgcac | tgagactgga | ttacacgctg | agcgagctgt | 60 |
| ccaattcttc | caactcttct | tcaattcttg | catcaatatt | cctctgaagc | actagaattc | 120 |
| ttcttctttt | gacttctgct a | aataaaaaat | tgcacagatg | ttaatctctt | ccttatttcg | 180 |
| ttctcaacaa | tagtaaagtg a | aagaaatttc | aatcattatt | agtcgaaact | gactatcaag | 240 |
| ttaactcaga | tttcgcagtt a | atcaactgct | ccaaattaaa | acatttgttt | gtcctcatgc | 300 |
| ataagacaag | ttctgagtgt o | gccggcacat | gagataacta | tgaatccatt | aaacatctgt | 360 |
| ttgatctcgt | gaggagcctg a | acgaatcaca | tggagatgaa | a | | 401 |
| <210> <211> | 6038 385 | · | | | | |

| <212> <213> | DNA Glycine max | |
|----------------------------------|--|-------|
| <400> | 6038 | |
| agcttagaaa | a tgagaattat taatagttac ttatgggatc aatgaactgc gtgataaag | 60 |
| gaacaacaaa | gtttgatgcc caaaaacaca tgtatactta taactaaggt tgaaatagaa | a 120 |
| tatgtgataa | a tgctaataaa ctttaaatga acgacaaaga cgcgtttatt ttattttgta | a 180 |
| gcgtgataca | a ttttcttaat ttagacgtac cacagcagtg aattatttat atgctaaata | a 240 |
| ccaatcgtat | tgttaataag aataatcatg agaccgatag ttattagata ttaaccagcg | 300 |
| cgcccaacat | ataagattca taaaatgtaa tagcatgtcc ctcaagagag cactgtagct | 360 |
| aacacctgaa | gagctatacc tttcc | 385 |
| <210> <211> <212> <213> | 6039 360 DNA Glycine max | |
| <400> | 6039 | |
| agcttatagc | cacaageeta gtttgetatt ataaaaaeet aeetaataea aacateaaag | 60 |
| tcagcaatat | gattgtgtga aaataaatag ctgcatagcc agccattatg tttgcttaac | 120 |
| actagagtgt | tttatatatg tagtagtaca ttagtactga actttgccat gtatgaacta | 180 |
| ttaatgaagc | atatacatca gtataactac aacatatttt aattatagca tgctatggtt | 240 |
| aattacttca | ttattgtttt ttttttatct atatcgaaga ggttacaaca attcagataa | 300 |
| cttacaaaac | taattaagcg agattccctc agttattatt gtttatttca gcctaccttc | 360 |
| <210> <211> <212> <213> | 6040 156 DNA Glycine max | |
| <400> | 6040 | |
| tatttgtgat | tattgagatt tttagaagga gctaatagtg aatattcttc acctttattt | 60 |
| ttaaattaaa | tagaagccaa aaacaattaa attaataatt atgttgaaac tcactggaaa | 120 |
| ataattatta | agtaaagata acccaactta aaactc | 156 |

| <210> <211> <212> <213> | 6041 352 DNA Glycine ma | x | · | | | |
|----------------------------------|--|------------|------------|------------|------------|-----|
| <400> | 6041 | | | | | |
| agctttgaga | taattcaaac | gacattaaat | tttttcttgg | atctccgatt | gtgtcctgca | 60 |
| gtatatcgac | atgcttgaaa | ttaaaagcag | acgctatgag | caaaatcaaa | cgacaataat | 120 |
| ttttaattcg | gatgtccgat | tgagtcgtgt | aatatatcga | gacgctcgaa | actgaaaaca | 180 |
| gaagctctgt | gcaaattcaa | acgacaataa | ctttttactc | ggatgttcga | ttgtgtcccg | 240 |
| tggtatatcg | agacgctcgt | aactgagaac | atatgctcgt | agcaaattca | aatgacacat | 300 |
| aactttaact | cagatgccga | ttgattcccg | taatatatcg | agacactcaa | aa | 352 |
| <210> <211> <212> <213> | 6042 394 DNA Glycine max | ς | | | | |
| <400> | 6042 | | | | | |
| tggatttcct | gttgtatgga | atctttcctt | cctaagatgg | agccaaaccc | agtccccctc | 60 |
| attaagaact | agctcatttc | ttcctctatt | gcccttaatt | gaatacacct | ttgtttggtt | 120 |
| ctctatttgg | gtcttaaccc | tctcatgcaa | cttctttaca | aactctgacc | tagattcccc | 180 |
| ttctttatgt | ataaaagaag | tgtcaagtgg | gaggggaatg | atgtctaagg | gtgttaaggg | 240 |
| attgaaccca | tagacaacct | caaaagggga | ttgcttggtg | gttctatgaa | cccctctatt | 300 |
| gaggcaaatt | ctacatgagg | aagatactca | tcccaagact | tatggttgcc | ttttagaaga | 360 |
| gcccttataa | gagtggatga | agacctattc | acta | | | 394 |
| <210> <211> <212> <213> | 6043 222 DNA Glycine max unsure at a | | ons | | | |
| <400> | 6043 | | | | | |
| agcttgctaa | cccatggaag | ctcctaatat | ctcccacact | ntntggggtg | ggccattctt | 60 |
| ggatggcctt | gattttctca | aaataaaatt | aaaaaaaa++ | tottoossa | | 100 |

| agaagactat | t attatctaca caaaaggtac acttctctat atttgcatag agggtg | tttt 180 |
|-------------------------------------|---|----------|
| tgttggatcg | g agtggcctca aaataattaa gaaggggggg gg | 222 |
| <210> <211> <212> <213> | 6044 353 DNA Glycine max | |
| <400> | 6044 | |
| tatgaactag | g atctgttaag atcgataact atattcaatt tataactatt attatt | ttac 60 |
| atatttttta | a tttacttatt ttatacaaaa agcaactgat gtgaaactaa taagaad | ctta 120 |
| attatatgaa | a tttaataaca taaaatacat cattaaatct tatacattaa ttgcatt | tttt 180 |
| gtaataaatt | aaataataca ttaatggaag aaaagttgtt cgagcaaaag ttttaaa | atca 240 |
| atcactcctt | tcatattaaa gtttcaactc gtgtaggttt gggacaggta tatgtat | ttgg 300 |
| ttttatcgca | a tgaatgggaa tggatactat tatacccatc ctacacatgc cca | 353 |
| <210> <211> <212> <213> <223> <400> | 6045 378 DNA Glycine max unsure at all n locations 6045 | |
| agctntgagc | caaaatcctg actcaccata taccttgacc cagggtgaga atgtcaa | atcc 60 |
| ttaccctcgg | aagcaaagaa aanaggagag aaggaaaatt tccaatcaaa ggaaaaa | agg 120 |
| agaggaaagg | aaattcccaa tcaaagagtg ggagaaagca aaaagaaaag | att 180 |
| cccaatcaaa | gaatgggaga aagaaaaaga gaaggagaag aaggaagg | gat 240 |
| caaggatcga | aagaaaacag aagatatgtg cagaggggat ctctggacca gacaata | itct 300 |
| aaacaaatac | agaattgtca ccaaatgaac aaaagaaaga anaggaaacc ataacct | aan 360 |
| agtggtcttc | tccctttg | 378 |
| <210> <211> <212> <213> | 6046 437 DNA Glycine max | |
| <223> | unsure at all n locations | |

A,

| <400> | 6046 | | | | | |
|-------------------------|--|-------------|------------|------------|------------|-----|
| gcttagcgcg | agtttggcgt | tgagcgaata | ttcacttact | cgcgctaagc | gcgacatcga | 60 |
| ggtaagtgag | ccctttttaa | gcctggaata | gcagaaaaga | aaggggcact | gggagataga | 120 |
| aaagagagcg | ctgaatagcc | ataagagctt | caagagtgaa | atacacagag | gcaaagaaca | 180 |
| gagcaaagaa | gccaactttt | gatcttttag | gaagagtttt | gagtgattgt | gagattccta | 240 |
| gaggtggagg | agacatcccc | actcctttgt | aagcaagcaa | tttctcttaa | ttcctcttct | 300 |
| tcagtgtaaa | aggagcttcc | ttgctatgga | aggctaaacc | ctgagttggg | gattcttgct | 360 |
| gagtaattga | tgtaaactct | ntccctatct | aattaagggt | gttntatgca | ttcattgttt | 420 |
| ctatcagtac | tatatta | | | | | 437 |
| <210> <211> <212> <213> | 6047 546 DNA Glycine max | | ons | | | • |
| <400> | 6047 | | | | | |
| aggctttgta | ccatcattac | ctgcactata | tatactcaag | cccgcttcta | caccctacct | 60 |
| atattgtgga | gcccttaata | ccatgcccac | aaataatgaa | accttaatct | aatatgtaca | 120 |
| aagattagcg | ggctcatact | taacccatgg | gcctgaaatc | taccctaagg | ctcataagaa | 180 |
| ccctatggcc | ttctcttgca | tctctagccc | aatcttcttg | gagtcttcta | tcaaattccc | 240 |
| ttgtggggta | agaatgcatc | attcccccc | ccccttgaaa | aggatttgac | ctcaaatccc | 300 |
| aagggtcttg | aaactctggg | cttttttcct | caacacctgt | aaaaagaaca | aaaacatatg | 360 |
| tattagtggt | gtttggtatg | ttaaagtaan | ggaaggtctg | aaaacccatt | tcctgggcaa | 420 |
| tcttccatga | aggaacatgg | ntnctcacca | actcaatgag | tggtgccaca | gtatagaana | 480 |
| atatgggaca | aaccttcttg | taaaagttgt | aagcatggaa | gccccacatt | tttctacact | 540 |
| ttgtgn | | | | | | 546 |
| | 6048 387 DNA Glycine max unsure at a | ll n locati | ons | | | |

| <400> | 6048 | | | | | |
|-------------------------------------|---|-------------------|--------------|--------------|--------------|-----|
| gaattacatt | t atcctgaage | c atccattgtt | gaaagataca | ı ttgcagaaaa | a agatatggaa | 60 |
| ttntgtttag | g agtacattga | a aaatgccaaa | ccagataggo | : tttcggagtd | c tcgatatgat | 120 |
| gagtgggagg | g caagggttt | g cgagggctac | : atgttataac | : tttgggtcta | ı aaggaattac | 180 |
| aacaagctta | a tttgtatata | a ctaaataata | gtaatgaagt | tctgtcatac | atagttcatt | 240 |
| atgaagcttt | tgttagggaa | a agtaaaccat | aaatgaccaa | gaatatggtg | r ttgaaagaac | 300 |
| ataataagad | tttcctaaat | tggtttaaag | atacaatctt | tggtggtgat | aaattggttt | 360 |
| aaagatacaa | ı tcttttgcaa | a tgataat | | | | 387 |
| <210> <211> <212> <213> <223> <400> | 6049 443 DNA Glycine ma unsure at 6049 | ux all n locat | ions | | | |
| gctgctaaga | gcaacaaata | actacaatat | gagcaggttt | cttggtcaag | gtggctatgg | 60 |
| cacagtgtac | aagggaatgt | taccagatgg | aaccatagtt | gcagttaaaa | agtcaaaaga | 120 |
| gattgaaagg | aaccatagtt | ntataatact | agtacttaat | taatgcacat | gtacattaaa | 180 |
| gtctaattga | ataacattat | ttgaatagtc | ttgttggcca | tactgattag | ttgtgttgta | 240 |
| ttatacatat | tagctgggga | ttccaatgct | tttcgtcctt | caaatcaact | atctttttct | 300 |
| tctttgttcc | cattattntt | ttcttataaa | atctaagaag | aagaatattn | tacttttaaa | 360 |
| tactttcaag | acatattgct | tacagcagca | acatacctac | acaactgttg | ttgggatcac | 420 |
| cattacgtgt | tctgttgtgt | ctt | | | | 443 |
| <210> <211> <212> <213> | 6050 447 DNA Glycine ma | x | | | | |
| <400> | 6050 | | | | | |
| agcttgtgat | tgattgtgga | acaagaaatg | cgtgaattaa | ttagtataaa | attgtgataa | 60 |
| tttaactaat | tgagttcgaa | ttttggatat | ataattattt | taaagaaaaa | aaatcgacta | 120 |
| taataatctt | acatgactta | agtagattta | tttttaagaa | aagatacatg | taatctttac | 180 |

| tgtaaaaata | tataaataat | gtattccagt | caatttgatc | agactaatta | aaaaaaaaaa | 240 | |
|-------------------------------|-----------------------------------|-------------------|------------|------------|------------|-----|--|
| agatttctga | tcaaattata | aattacaatc | acgattagga | tcataaaaaa | ttatgtcacg | 300 | |
| cgaagatatt | cctattaatt | tcatcctcag | aaatatacat | atgctgtaaa | ggcaaaagaa | 360 | |
| atacattatg | gaaaagaatg | aagcattatt | ctaatgaaca | taacaagaac | aaagtaaaat | 420 | |
| cttgcattaa | tgatgatatţ | gattatg | | | | 447 | |
| <210> <211> <212> <213> <223> | | x all n locat: | ions | | | | |
| <400> | 6051 | | | | | | |
| cctcacacta | taggacagct | cataattcat | agagtaatac | accctataag | caagcgctac | 60 | |
| aaaatttcag | attactcaaa | ctttatccaa | aataggaaaa | aacctcacga | cacgcatagt | 120 | |
| caaccaaact | cctctttatc | aagtaaagac | caaataaaaa | attcgcaata | gtgataataa | 180 | |
| taacaataac | taatattaat | atcaattaat | aagataaata | cattacatca | ataaaagaaa | 240 | |
| gaaagaaatc | aagtagcaat | agcgtgatga | gctacttaac | acgttctgaa | ctanagcaga | 300 | |
| anataaaaat | tattatttat | acaaagaata | acctcaacaa | aaggaagatt | tgagacatgg | 360 | |
| caaaaaccag | agaggaacaa | cttgcatctt | gaacctanag | actcattctt | ttcttcattt | 420 | |
| cttcatctca | aagcaagttc | att | | | | 443 | |
| <210> <211> <212> <213> | 6052 418 DNA Glycine max | ς | | | | | |
| <223> <400> | unsure at all n locations 6052 | | | | | | |
| atttggtctg | tgcactatat | ttgacattgt | ggcattgaga | gattangcct | aatacttaga | 60 | |
| aatagtccaa | aaggtgattg | ttatctttta | taaaattgac | ttatatttat | ttaaaaaaac | 120 | |
| attgtttatc | atcataaaaa | taaaatttac | taacttagat | cttaaggagt | ttataacaaa | 180 | |
| taacgcacag | tatttaacta | actcacttaa | attccttgat | gttgaattta | agtatagtcg | 240 | |
| ataatataaa | attttagata | acttttctat | tactaataga | tgttaaaata | attaaataat | 300 | |

| attgaattta | atattatact | taaattttat | cttcttttt | attaaaccat | cttgtaataa | 360 |
|-------------------------------------|--------------------------------------|-------------------|------------|------------|------------|-----|
| ttatatattg | tctttaaaaa | agntactana | ttaatcttat | ttttatctac | tcttatta | 418 |
| <210> <211> <212> <213> | 6053 399 DNA Glycine ma | × | | | | |
| <400> | 6053 | • | | | | |
| acccgtcata | tgtggtacta | ggtggcgatc | gggcgatggc | gcatatcaac | tctaccactt | 60 |
| ccacaaatca | aacatgaacc | caccatcccc | agttgcccac | ctgtgactga | gctcacgtac | 120 |
| tcctacgtag | cccttatcct | cgctcctctc | agcaccgggt | gcccattaac | cactccaagc | 180 |
| ttccacaata | tccaagcaat | tcaattccaa | ttaccatgaa | ctaccctaaa | ccaagaaaac | 240 |
| agggcagagg | cagaaaactc | tgcccaaaac | acattcacac | attacagctt | tccttactca | 300 |
| tatatcccag | caacattctc | ttcgcttcga | atcgttaacc | atagaatcaa | cttgataatt | 360 |
| atactggagg | ttcctagtac | ataagtctac | atcttgacc | | | 399 |
| <210> <211> <212> <213> <223> <400> | 6054 361 DNA Glycine max unsure at a | x all n locat: | ions | | · | · |
| agcttgngag | cagtctaata | gattggctnt | gaacttgatg | agatttacta | tagccgcaaa | 60 |
| tgtgaagcta | tgtatgccca | aaataaataa | tggaaaggaa | ttcatgaaat | tggtcaaata | 120 |
| ttacttgcaa | tttgatatta | ctgacaagcc | aattgtggag | aatttatcaa | gtgagctaac | 180 |
| aaacttggtc | ttaaccaatt | catgatcatc | tgacatagat | ggttaatctg | gaagcaaagt | 240 |
| tgaattccat | ggagatggaa | gtgagtgagt | tctttctagt | acaatttatt | ttgaattctc | 300 |
| ttccaactga | atttggccaa | tttcaagtga | aatataacac | tcttatggaa | aaatggaatt | 360 |
| t | | | | | | 361 |
| <210> <211> <212> | 6055 479 DNA | | | | | |

| <213> | Glycine max | • |
|-------------------------------|--|-----|
| <223> <400> | unsure at all n locations | |
| tctctntgtt | ntccttcttc ttctttgtgc caaaagctct ccaaagttnt ctggttntct | 60 |
| aaaccttgaa | a aacttgtgct attcattctt ttcatctctt ctccctttgc caaaaagaat | 120 |
| tcgccaagga | ctaaccttct gaattctttt tgtgtctctc ttctcccttt tctaaaagaa | 180 |
| caaaggacta | accgcctgaa ttattttgtg tctcccttct cccttgtcaa agaattcaaa | 240 |
| atgacacagt | ctgataattc ttttgattct tccttttccc atatacaaaa gacttcaaag | 300 |
| gactaaccgc | ctgagaattc ttttgtatcc ccattcacaa agtatcaaag gtttaaccgc | 360 |
| ctgagatctt | tgtcttaaca cattggaggg tacatccttt gtggtacaag tagagggtac | 420 |
| atctacttgg | gtttgactga gaacaagaaa gggtacatct cttgtggatc agttctagt | 479 |
| <210> <211> <212> <213> <223> | 6056 404 DNA Glycine max unsure at all n locations | |
| <400> | 6056 | |
| agacaaaata | taacatttgt attcagtgca ctctctaatg gtcaaaaaag ggaacagttg | 60 |
| tgaaatacag | agacetecce tatetggege gteagacett geetgtaaac caaaateata | 120 |
| gtcgccctgg | acaacctaac caaagaaatc cggaccccac ttgtctaggc ttgggggcct | 180 |
| tgacagcttg | acaaaactcc aaatctcaca cctgtcaatc ttaccactct taacactgga | 240 |
| caataatttt | ccatgcttgg gggctcgaca aactcacgac cctnctactt gtcaaggcta | 300 |
| ctacctcgga | catcagacaa tctccattgt gcactatcta gggtccacaa aatacatgtg | 360 |
| tcaaaaaata | cacgtgtcaa gctatgtgga ttatgagcac acat | 404 |
| <210><211><212><213> | 6057 113 DNA Glycine max | |
| <400> | 6057 | |
| | | |

| atatcatgtg | g agtctactac tatatcattc ctatctaata aaagggagac ctg | 113 |
|----------------------------------|---|-------|
| <210><211><211><212><213> | 6058 382 DNA Glycine max | |
| <400> | 6058 | |
| agcttcaggt | tgttcaattg ctcaagaatg atgcacagaa gggtaaaggt ctgtatggt | g 60 |
| gtcggcagag | g gagcataaac cacagagtet tgcaacaggt acatattttt tattcatgg | c 120 |
| cagttgggtt | actaggttaa ccaaggtgtc tagtttacct tcaagcttct tagtttcag | a 180 |
| tgatgcagat | gagtttgtgg ctacctcatg cactcctcta attactatag cattatttt | t 240 |
| ggcgctaaac | tattgggagt tggaagccat cttctcaatt aaattcctag cttcagcag | g 300 |
| ggtcatgtct | ccaagggete caccactgge ageatetate atacttetet ccatgttac | t 360 |
| gagtccttca | taaaaatatt ga | 382 |
| <210> <211> <212> <213> | 6059 367 DNA Glycine max | |
| <223> <400> | unsure at all n locations 6059 | |
| tenggetget | gaattgctcn cggntgctgc atggaagggc aaaggtctgt atggtggtca | a 60 |
| ncaaaggagc | acaaaccaca gacccttgcg acaggtacag atttctggtt caaggccagt | 120 |
| tgggttacca | agttaaccaa tgcatccagt ttgccttcaa gcttcttacg ttcagatgat | 180 |
| gcagctgagt | ttgtagctac ctcatgcact cctctaatga ctatagcatc atttcttgcg | g 240 |
| ctacactgat | gggagttgga agccatcttc tcaattaaat gtctggcttc agcaggagtc | 300 |
| atgtcttcaa | gggctacacc actggcagca tctatcatac atctctccat attactgagt | 360 |
| ccttcat | | 367 |
| <210> <211> <212> <213> | 6060 413 DNA Glycine max | |
| <223> | unsure at all n locations | |

| <400> | 6060 | | | • | | |
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| agctagacan | tgtcacatga | taaatggtta | ataaaaacat | tcgaacaaat | caaagtattg | 60 |
| ttttaaaatt | tagaaaacaa | cattaaaccc | aacaaataaa | aaaaaataat | catatgttca | 120 |
| tatataatta | tttttaaaaa | aaatatataa | atgatagtta | agataaacat | gacaataaag | 180 |
| caccacgaga | ttgtatgtta | tttcttattc | ttgttcccta | acatcgtctc | catcatcccg | 240 |
| tcccttattc | tagacgacga | tactaaacaa | atatcgaaaa | gaaaaaatga | atattaataa | 300 |
| caataatagt | taccatagat | acttataaag | tataattgta | attgtgtaga | acttattaga | 360 |
| tgagaaccaa | aactaatatg | attgaaatat | ataatatatg | ttataaaata | aca | 413 |
| <210> <211> <212> <213> <400> | 6061 391 DNA Glycine max | ζ | | | | |
| cgtatggtta | aagtctcatg | aatgtcacgt | gctcatgcta | caattgttag | gcgtggctat | 60 |
| acgagacatc | ttgcccaaca | tagtcatgat | aacgataact | cgcctatgct | ttctcttaca | 120 |
| tgctatatgt | agcaaagcca | ttgatccaat | aatgtttgat | gagttggaaa | atgacgccga | 180 |
| aattatactg | tgccagtcgg | agatgtattt | tccccctggg | ttctttgacg | tcatgatcca | 240 |
| cttgattgtg | catctagtta | gagaaatcaa | ctgttgcgga | cctgtttatc | tatggcggat | 300 |
| gtacccactt | gagcgataca | tgaagatctt | attagggtgt | acaaagaatc | tatatcgtcc | 360 |
| acaagcatct | attgttgaga | ggtacattgc | a | | | 391 |
| <210> <211> <212> <213> | 6062 328 DNA Glycine max | | | | | |
| <223> <400> | unsure at a 6062 | ll n locati | ons | | | |
| agcttatgta | gcctatgttg | ataactggtg | aaagtttttc | aggttaaagc | agcataactt | 60 |
| anattggatc | atcaaatata | taaagatttg | gcatgcatgt | ttactctttc | attntacttc | 120 |
| tttcaaggct | ttgtatagga (| atgtgaaaag | cacgtgatgt | ccaacttgaa | ttgaacaatg | 180 |
| ctgcaatctg | tcaattttag a | attaatttca | tatgttttgt | tgtagttgtg | tagtgtctta | 240 |

| tcatggtgct | ttaatgcttt atag | gctaaa | caatgaacaa | gtaatgggtt | atcaaaaaga | 300 |
|----------------------------------|--|--------|------------|------------|------------|-----|
| gacttgtggg | ttgacaattg gaga | aact | | | | 328 |
| <210> <211> <212> <213> | 6063 350 DNA Glycine max | | | | | |
| <223> <400> | unsure at all n | locati | ions | | | |
| tctccgtgta | atatccgagt ttag | aactct | cttgtaatct | tcaaattatn | ttacacagat | 60 |
| aataaaatga | tctcttaccc ctct | ctagat | cttctctaaa | ttccttacgg | catcagaatc | 120 |
| tatcctagat | ccaataaaaa aggt | aaccta | ccatattatc | catgcactga | acccaaaagt | 180 |
| gatgggcatg | acgggtgtat tgtg | aaaaac | ccaagtccca | tatcggctag | agatagtgcc | 240 |
| aagatagaaa | gtataagggg caga | caaccc | ttgccctatg | atctaacttt | taagggtaag | 300 |
| ttagaccaca | accttgtgaa ctat | attgtt | gcagatgatt | gcagatcatt | | 350 |
| <210> <211> <212> <213> | 6064 419 DNA Glycine max unsure at all n | locati | ons | · | | |
| <400> | 6064 | 20002 | | | | |
| agcttcgcaa | canattctac tctc | cgatcc | tcaacatcga | caagctgtgg | tccctggtcc | 60 |
| cgcaagaagt | gaaggacaac gcct | ccaagg | agaacaaggc | gccgctcatc | gacgtcacgc | 120 |
| agttcgggta | ctttaaggtt ctcg | gaaagg | gcgttttgcc | gcagaaccag | cccgttgtgg | 180 |
| tcaaggccaa | gcttatttcc aaga | tcgctg | agaagaagat | caaagaggct | ggcggcgccg | 240 |
| ttgttctcac | cgcttgaatt tgac | ggtatc | acttttttga | acgatttang | ttttgttctg | 300 |
| atacgttttg | ttttggatta tgtt | gntgnt | tagtctctgc | tatatttcan | gagtaaattg | 360 |
| aaggtttatt | attttaattt gcgc | gaataa | ctatgccagc | ctgatgacat | tagaatcta | 419 |
| <210> <211> <212> <213> | 6065 342 DNA Glycine max | | | | | |

| <223> <400> | unsure at 6065 | all n locat | ions | | | |
|----------------------------------|-----------------------------------|-------------------|----------------|------------|------------|-----|
| agctngcctc | anagaggtcc | aggaatgata | tggcggccga | agggactagt | tccgctcctg | 60 |
| agtatgacag | tcaccgcttt | aggagcgctg | tacaccagca | gcgcttcgag | gccatcaagg | 120 |
| gatggtcgct | tctccgggag | cgacgcgtcc | agctcatgga | cgacgagtat | actgatttcc | 180 |
| acgaggaaat | aaggcgtcga | cggtggacat | cactggttac | tcccatggcc | aagttcgatc | 240 |
| cagaaatagt | ccttgagttt | tatgccaatg | cttggccaac | agaggagggc | gtgcgtgaca | 300 |
| tgagatcctg | ggtaaggggt | cagtggatcc | ccgttgatgc | cg | | 342 |
| <210> <211> <212> <213> | 6066 489 DNA Glycine man | x all n locat: | ions | | | |
| <400> | 6066 | | | | | |
| tccatcaatc | tatctctcta | accatcaagg | ccgatatatg | tatggatatc | ctactcaagg | 60 |
| cgtcagccac | tacattggct | gtgccggggt | ggcaactaag | ctcaaaatca | taatctttaa | 120 |
| gaaactctaa | ccatctcttt | tgacgcatgt | tcagctcttt | ctgactaaac | aagtacttaa | 180 |
| ggctcttatg | atcactaaac | acctcaaact | tggagccaaa | caggtaatgc | ctccacatct | 240 |
| taagggcaaa | aactacagca | gctaactcca | agtcgtgagt | gggataattc | ctctcatgag | 300 |
| tctttagttg | tctagaagca | taggctatta | cttggccatt | atgcatcaac | actcctccta | 360 |
| tacccatctt | tgatgcatca | caatacacct | canatggttc | cctcgggtta | ggaaaaacta | 420 |
| gcactagagc | ggtcgtcaat | ctttccttaa | gggtcgtgaa | actatgctca | cactaggtgt | 480 |
| cccacccat | | | | | | 489 |
| <210> <211> <212> <213> | 6067 203 DNA Glycine mas | | • [.] | | | |
| tgccccaaga | gactcagcat | aaggatgcac | agaccatagt | tgcgtatgta | gaacaattgt | 60 |
| atgaccaagt | gaatgtgcaa | attgcaaaga | agaatgatag | ctatgccttg | cacgcccaaa | 120 |

| agaaaaggaa | ggaagtggta | cttgaacccg | gagatgatct | tggacatttg | aggacaaatg | 180 |
|----------------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| ttttccaaga | aggagggaat | gat | | | | 203 |
| <210><211><212><213> | 6068 298 DNA Glycine max | κ | | | | |
| <400> | 6068 | | | | | |
| gagcggctcg | atatattacg | agactcaatc | ggacattcga | gttaaacgtt | attattgttt | 60 |
| gaatttgctc | acagcttgtg | tattcaattg | ttagtgtctc | aatatgttac | gggacttaat | 120 |
| cggacatcgg | agctaaaagt | tattgtcgat | ggcattggct | acgagcttac | attgtcaatt | 180 |
| acgagcgtct | cgatatatta | cgggactcaa | tccaccctcc | gaggtaaaag | ttattagtcg | 240 |
| ttgcattcct | ctacgagctt | gcgttttcca | ttacgagcgt | cttgatatat | tactggac | 298 |
| <210> <211> <212> <213> | 6069 452 DNA Glycine max | | | | | |
| <223> <400> | unsure at a 6069 | ll n locati | ions | | | |
| agcttgcttc | tacagtaagt | gttgatagtc | aattagcact | tagtcttagg | aaaaaggtaa | 60 |
| ctgtgtttta | aaatttgcag | atacgaaaaa | ccaacttgca | gacatcttca | caaaaccact | 120 |
| aaccaaagat | tctttctaca | ccattagaag | ataattagga | cttctagatg | caagtgactt | 180 |
| agacaaatga | tttatgtttt | gatgacttat | ttgttattta | tgcacatatg | cttctattat | 240 |
| aatgtgagga | taatttatta | tcttgtttga | tttctataag | cttctctctt | ttcttgttta | 300 |
| attattatat | tttttttaac | ccttgtattt | ggctatgttn | ttatgacatt | tgaatactta | 360 |
| gtatttcttt | tattatttga | ttagtatgac | tggacatgat | gattatattt | acttgctttt | 420 |
| gggtgttatg | gtatgaagtt | taaacttatt | tt . | | | 452 |
| <210> <211> <212> <213> | 6070 487 DNA Glycine max | | | | | |

| <223> <400> | unsure at 6070 | all n locat | ions | | | |
|-------------------------------|--|-------------|------------|------------|------------|-----|
| tagatgaaga | tgaatccgtg | gccacctcat | ggactcctct | aaggacaata | gcatcatttc | 60 |
| ttgcactgaa | ttgttgggag | ttggaagcca | tcttctcaat | caaattccta | gcctcagcag | 120 |
| gggtcatatc | accaagagct | ccaccattga | cagcatcaat | catactcctc | tccatgttgc | 180 |
| taagtccctc | atagaaatat | tgaagaagga | gttgctcaga | aatctggtgg | tgaggacagc | 240 |
| ttgcacacaa | tttcttgaat | cttccacaat | actcatacaa | gctctctcca | ctaagttgcc | 300 |
| tgatgcctga | aatgtctttt | ttgatggcag | tggtcctaga | tgtagggaag | aatttctcca | 360 |
| agaacaccct | cttaaggtca | tcccagctga | naatggacct | gngagcaagg | tagtatatcc | 420 |
| aatcttttgt | cacttccttc | aaagaatgan | gaacagcctt | tagaaagata | tgatcttctt | 480 |
| ggacatc | | | | | | 487 |
| <210> <211> <212> <213> <223> | 6071 436 DNA Glycine max unsure at a | | ions | | | |
| <400> | 6071 | | | | | |
| agcttgacaa | gagggtctgt | ntaactaaca | ataataataa | taactttatt | ttatcaaatc | 60 |
| ttatcttatc | cagattttat | tccatccaga | ttttattccg | tctagatttt | atttcgtcca | 120 |
| gattttattt | tatccatctt | atcttatctt | gtccagattt | tattttattt | cgtttatggg | 180 |
| cttggactta | aaatagattt | gtaagctttg | tggctaagaa | cctcatccat | acattttta | 240 |
| atagtatgct | ctttttattt | tcttttgata | tactttgtgt | tttaaccact | traattraat | 200 |
| | | | | cccaacgacc | cgaaccaac | 300 |
| atgattttgt | ttatcaatta | tttttggatt | tgtacattac | | | 360 |
| | | | | ttatatgaaa | ttttataagt | |
| | agttagattt | | tgtacattac | ttatatgaaa | ttttataagt | 360 |

| ctcagctgag | j tatctatttt | ggttatggtg | tgaaaactct | atatggtgtg | g aaagcttgcc | 60 |
|------------|--------------|--------------|------------|------------|--------------|-----|
| ctgctaaagg | g attgcttgta | actagcatgo | actggtgcat | gtgcgcatca | a tatgctttgg | 120 |
| tttggtctgt | gaaatgaaat | tatggatgag | ccatgttggt | tetetggttt | aggaagtgtc | 180 |
| aaatgaaatt | tgctagtagt | tgtctgctca | ggtgttggag | cttttatgca | ı ggctttggag | 240 |
| caatttctgo | : tagcaatttc | ctttgcatct | atacaatttt | catgacagta | aggaactatt | 300 |
| gatatggact | aggaccactg | ttaaatctta | tagcagtttg | tagagtttga | aaaataatca | 360 |
| catgatttaa | tgtcctgttt | cttctctttc | tcttataaac | ttattataaa | . tttacacatt | 420 |
| gttttggagc | tgga | | | | | 434 |
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| <211> | 400 | | | | | |
| <212> | | | | | | |
| | DNA | | | | | |
| <213> | Glycine max | x | | | | * |
| <223> | unsure at a | all n locat: | ions | | | |
| <400> | 6073 | | | | | |
| taaaacctat | gaagaacaga | cactcctgaa | ttagacacac | aaaaactggc | atgtgtgttc | 60 |
| tagctagttt | ttaaaagata | gtagttgctt | ttattttcta | accttcgcag | atttattcat | 120 |
| tttaaaatag | gtcgtgggta | aatatgtttt | gcatgtaatg | aactaacgtt | gaagttgggt | 180 |
| | | | | | tcagtgcatg | 240 |
| gagagagaaa | agattaaccc | tatgatagtt | tgcagcgaaa | gaaaaatgaa | agagtgaaat | 300 |
| aaacaatata | atgatcgatg | agatttatat | ttttacattn | tattttagtt | canaactttt | 360 |
| atctcaattt | agtttcattt | tatttcattc | catctcactg | | | 400 |
| | | • | | | | |
| <210> | 6074 | | | | | |
| <211> | 487 | | | | | |
| | | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine max | 3 | | | | |
| <223> | unguro at a | .11 m 1 | | | | |
| | | ıll n locati | ons | | | |
| <400> | 6074 | | | | | • |
| gagtagcatt | ctgctctgga | gtctcttatg | taaaatntaa | gtgggaaaga | caaataaaca | 60 |
| gaaatacaga | aaggaagggg | aacagagaag | aacagagaga | tcaaagaagc | tgtgcactgc | 120 |
| acttctgtta | ttattattcc | agcctgtcta | aaatgcaaca | gccctacttt | atttataggc | 180 |

| agctacccga | caactaagaa | ataacagtag | ctgactaact | aactgacatc | cttttctttt | 240 |
|----------------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| acatatcagt | ctcctttcgc | ttataacagc | tcatcatgga | gctgatttca | gtaaataata | 300 |
| caagcagttt | tctggaattt | aatcgctagt | tcctaacttc | atttatgggc | cttttcatca | 360 |
| atatttgcag | aaattggctt | caaaggatct | ctcaagaatg | gctgagccaa | taaaggagct | 420 |
| agatattctg | gtgagtcagg | ttcatttcat | tagcttgggt | cttatanttt | agntcttggt | 480 |
| tttctaa | | | | | | 487 |
| <210> <211> <212> <213> | 6075 404 DNA Glycine max | ς. | | | | |
| <400> | 6075 | | | | | |
| agcttcagaa | ttcaatttcg | agcgtctcaa | tagattacgg | gactcaatca | gacatccgag | 60 |
| caaaacatta | ttgtcgtttg | aattagctca | gagcttcaga | attcaatttc | gatcgtctcg | 120 |
| atatattacg | ggtctcaatc | agacatctga | gtaaaaaagt | tattatcgtt | cgaatttgct | 180 |
| gagagcttca | acattcaatt | tcgagcgtct | cgatgtttta | tgggacttaa | tcagacatcc | 240 |
| gagtaaaaag | ttattgccgt | ttgaatttgc | tgagagcttc | aacattcaat | ttcgagcatc | 300 |
| tcgatatatt | acgggactca | atcagacatc | cgagtaaaaa | gttatcgtcg | tttgaatttg | 360 |
| tcagagette | aacattcatt | tggagcgata | catatatacg | gact | | 404 |
| <210> <211> <212> <213> | 6076 310 DNA Glycine max | : | | | | |
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| gatcggctag | gtttcttcga | gcgagctcaa | ccgaagatgt | atttctgccg | acaccggcat | 60 |
| tgtgtcggtc | agaagaacat | tagaccgcct | cggcaaagaa | acatgattca | ccgatattga | 120 |
| cagagaaaaa | tgctagccct | attcggcaat | gaaagatgac | cgatcgaggt | ctaaaaaaga | 180 |
| agcatgaccg | gattacgccg | atcgaacatt | ctctaataga | tatcctgcaa | gtattattca | 240 |
| gggattgaat | ggagaaaaca | gtagccggca | tctgtagtaa | acaggcgtga | ctgatatttt | 300 |
| cagccaaca | | | | | | 310 |

| | <210><211><212><213> | 6077 403 DNA Glycine max | |
|---|----------------------------------|--|-----|
| | <223> <400> | unsure at all n locations 6077 | |
| | agcttctatg | ttgagcaagg tggtcaggta ccaagcctta tacataactt atacatgtta | 60 |
| | tttttcatta | tagtaattat agcattaaac atttttgtgt tatttataat agaattgtac | 120 |
| | actcaaagta | aaagtgattc tatctatcta tccatccatt tatatataat ctgattttga | 180 |
| | aaaataacac | tttctaagac gtttctttaa aaaaacgttt atgaaagtga actttctaag | 240 |
| | atggttcttc | agaaaaccgt tttagaaagt ctactttcta agataatttt ttcagaagta | 300 |
| | cactntataa | gacgtttctt tagaaaatca tgtttcagaa aactgtctta gaaagtagag | 360 |
| | tttctaagat | ggttntttca taaaactatc ttagtaagac tac | 403 |
| | <210> <211> <212> <213> | 6078 335 DNA Glycine max unsure at all n locations | |
| | <400> | 6078 | |
| | tatgattcag | atgctatctt ctttttcctc atgtgcatct gctacatctg ctctgtctct | 60 |
| | ttgtcctttn | tcatagaagg gcactttatt ccttggtttg acttgttttc tacatttcac | 120 |
| | ttgatactac | aggtagttat gatatcttcg ctggccatgg ttatgtcatt tgtaataaat | 180 |
| | gaactgatgt | atattgatat teteageage aacttatage eettggaaca ttegtgatet | 240 |
| | ctaaccagaa | ttcagaaata aaaatgatta tattctactt taaaatgtgc taactgtctt | 300 |
| | ctgtttgaag | tatggntnta tttctgactc tctca | 335 |
| | <213> | 6079 386 DNA Glycine max | |
| | | unsure at all n locations 6079 | |
| č | agctttgctt | ctacacttaa gagggggcgg gggtgaatnt aagtttcaaa atttcccact | 60 |

| aacaaacttt | taaccccctt | ctaaatgata | ggctcagaat | gcaaaaaaag | aagcatcaat | 120 |
|-------------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| caatttaaca | atgttcttta | aacatgcaag | acaaaattga | ttgtaataac | ataaatgaga | 180 |
| taagggaaga | gagaaatgca | aaatcgattt | atactggttc | gaccacttcc | cgtgcctaca | 240 |
| tccagtcctg | aagcaaccca | cttgagattt | tccactatct | ctgtaaatcc | tttatagact | 300 |
| ttgaacacac | cttgggatcc | ctcacccttg | tgttgaaaga | ttctccaaga | gacaacccgt | 360 |
| ctcttgatta | caattgtcat | aatcca | | | | 386 |
| <210> <211> <212> <213> <400> | 6080 414 DNA Glycine ma | x | | | · | |
| tcgcgctaag | cacaaagacc | cctgattgat | tggctgaagg | gttcagcgaa | gcacacatca | 60 |
| | | | | agtagtgggc | | 120 |
| | | | | atagctacac | | 180 |
| | | | | ttcaagctgg | | 240 |
| aaaggatgca | ctaagcacca | acatcattat | gttttgaaat | cattaaaagt | gcgcttagcg | 300 |
| caggtagtgg | cgctaagcct | gaatcactct | ctataagttg | aagcctgggt | gcacgctaag | 360 |
| ccaaactttg | taggctaagc | gcattttgca | ggaccaatca | gagctactat | catc | 414 |
| <210> <211> <212> <213> | 6081 361 DNA Glycine max | K . | | | | |
| <400> | 6081 | | | | | |
| agcttaataa | atctatatat | ggtttaattc | atgcttctcg | tcagtggtac | cttaagtttc | 60 |
| atgggataat | ttcttcattt | ggctttgatg | aaaaccccat | ggatcaatgc | atataccaca | 120 |
| aggttagtgg | gagtaaaata | tgctttcttg | gtttatatgt | agatgatatt | ttacttgcag | 180 |
| ccaatgatcg | gggtttgcta | catgaggtga | aacaatttct | ctctaagaat | tttgacatga | 240 |
| aggatatggg | tgatgcatct | tatgtcatcg | gcattaagat | tcatagagat | agatctcgag | 300 |
| gtattttggg | tctatcacag | gaaacctata | ttaacaaaat | tctagagaga | tttcggatga | 360 |

| a . | | | 361 |
|----------------------------------|---|------------|-----|
| <210> <211> <212> <213> | 6082 418 DNA Glycine max | | |
| <400> | 6082 | | |
| agctcttgag | g aaaactteet tgagaageta gagettaget acacacacee o | ctctaataac | 60 |
| taagctcacc | c teettgagaa getteattga gaagatteet aaagaagtta g | gagcttagct | 120 |
| acacacatcc | c cctataatag ctaagctcac ccccatgcca aaatacatga a | aaatataaaa | 180 |
| aaagtcccta | a tttcaaagac tactcaaaat gccctgaaat acaaggctaa a | aaccctatac | 240 |
| tactagaatg | g gccaaaatac aaggcccaaa agaaggaaaa accaattcta a | acatttacaa | 300 |
| agaagaatgg | g atccaacctt gacccatggg ctcaaaaatc taccctaagg t | tcatgagaa | 360 |
| ccctatggcc | c ttetttagta getetageee aageetettg gagtetteta t | ccaatac | 418 |
| <210> <211> <212> <213> | 6083 123 DNA Glycine max | | |
| <400> | 6083 | | |
| atctgatgat | cttcaacatg accgatgtta acgaagtgac gctcacatcg g | gatcttaaga | 60 |
| taactgatgt | tctcggatac acattattta caaatttgcc accatgttta t | gcttacatc | 120 |
| cgc . | | | 123 |
| <210> <211> <212> <213> | 6084 300 DNA Glycine max | | |
| <223> <400> | unsure at all n locations 6084 | | |
| agcttcttgt | gcgttcacca caggtgggct gtctcttgng caagggaggt c | ttgttatat | 60 |
| ctgaaatgcg | aagggccaca ggtgctagta ttcgcatttt ttcaaaggaa ca | agattaaat | 120 |
| acatttccca | aaatgaagaa gttgtacagg taactttcag tgtaccttga ga | aaagagcaa | 180 |

| gctatgtttt | ttcattggct tatccaaact ttgtatccta ctattcagct ctagtttcaa | 240 |
|-------------------------|---|-----|
| tcctaggatt | atgaatatgc attatgaatt ntgtaaaatt ttacaatttg tgatttttac | 300 |
| <210> <211> <212> <213> | 6085 357 DNA Glycine max | |
| <223> <400> | unsure at all n locations 6085 | · |
| ctgtagagga | atccatcgga gttgtgtttg gtcgacatcc catcataccc gaatcagata | 60 |
| atatgtccaa | agtatacttt ctttgcgaca aatggattcc cttagaggaa cgcgcgattt | 120 |
| ccaggccaag | gaagtacttt aagtttccaa gatccttgat cctaaaagct tgatcaagca | 180 |
| atgtgagcat | ctcctgtatt tcagtgttgc tgttgcctgt taaaataatg tcgtccacat | 240 |
| atactaagag | tatcgtggtg actgaaccat taaagcggag aanaagggaa tggtctgagt | 300 |
| gagactgttg | gaacccatgc attggtagga tacccgatag cttcacgaac cattgac | 357 |
| <210> <211> <212> <213> | 6086 385 DNA Glycine max unsure at all n locations | |
| <400> | 6086 | |
| agcttaaggc | ctgctttcat attcaaatca aatcagtgtt tcaaaagttg ttcttttatc | 60 |
| aagtccatgc | aaaaaatatct gagttcattt ggtttttggg aaagtccttc attgtttttc | 120 |
| attctcaaat | gttttcaaaa gaaatccttt tgttgtcttc tgatccaaaa ataagtttca | 180 |
| aaaatactag | ttgttgattt tttccaaagg atgttacatt caagacaaaa aaaatttaag | 240 |
| tcccaaaaag | agttataatc tataactata ctaatagaat ataaaagcac gcacaaatta | 300 |
| gtcaaaataa | actcgtgtaa gtttttcaaa aaattcaaaa caagntcaaa tcatggttga | 360 |
| agagctcaat | ctccttgacg atcat | 385 |
| | 6087 533 DNA Glycine max | |

| <223> <400> | unsure at all n locations 6087 | |
|-------------------------------------|--|-----|
| cgcttgatgc | ttgatcccct gattacggac ctatgcaact gaagctgatg tgaacatgat | 60 |
| taangataca | a ttnaattaat atatgaacat tgactccctt attcatacat atgcgagggg | 120 |
| cagagggtga | a tacangtetg ettaatetta attgaeteea cacaagtett aagggettet | 180 |
| acatctggag | cattgaatac ctcatgtctt gctaaccatt taatcctctc aatggagata | 240 |
| tgctctaatc | ttagatgacg ctcatagagg aagtctcatt aataatacac cgtttacact | 300 |
| agttcgaacg | tgcgttacac tattaaaggg cttactttgg taaccactag tagacgagcc | 360 |
| gtgatacatt | gatccacttc cagcacactt cgatcttcaa tattacaagt gactctcaag | 420 |
| ctgtgtcttt | agaatggaag gacatccata tggaacatac tggaataaca agagaggtca | 480 |
| agaacacttg | gcacataata agtcgttcta atatgagata gagtattatt taa | 533 |
| <210> <211> <212> <213> | 6088 388 DNA Glycine max | |
| <223> <400> | unsure at all n locations 6088 | |
| agcttctata | gaaggttcgt tcctaatttc tctacaattg catcacctct caatgagctg | 60 |
| gtgaagaaga | atgtggcatt tacctgnggt gaaaaacaag agcaagcctt tgctttgctc | 120 |
| aaagaaaagc | ttactaaggc acctgttcta gctcttcctg acttttctaa aacttttgag | 180 |
| ctagaatgtg | atgcctctgg agtgggagtt ggagctgtat tgttacaagg tgggcaccct | 240 |
| attgcttatt | ttagtgaaaa acttcatagt gccaccctca actaccccac ctatgataaa | 300 |
| gagctttatg | ccttaataag agccctccaa acttgggaac attatcctct gttcaaagaa | 360 |
| tttgtcattc | atagtgatca tcaatcac | 388 |
| <210> <211> <212> <213> <223> <400> | 6089 429 DNA Glycine max unsure at all n locations 6089 | |
| agaaagaggg | agagaaagag agaggcggga gcacgaaatt gaaggaagaa aaagggagag | 60 |

| aagttgaact | ttgagttgtg | tctcacaaga | ctctcattca | tcaaagttac | aacaagtgtt | 120 |
|-------------------------|-----------------------------------|--------------|--------------|------------|------------|-----|
| acacatgctt | ctatttatag | actaggtago | : ttccttgaga | agctttcttg | agaaaacttc | 180 |
| cttgagaagc | : ttctttgaga | aaacttcctt | gagaagctag | agcttagcta | cacacacccc | 240 |
| tctcataact | aagctcacct | ccttgagaag | cttccttaag | aagattccta | aagaagctag | 300 |
| agcttagcta | cacatacctc | tctaatagct | aagctcacct | ccttgagatg | agaagctaga | 360 |
| acttagctgc | acacccccta | taatagctaa | gctcaccccc | atgacacana | aaacatgaaa | 420 |
| taccaaaaa | | | | | | 429 |
| <210> <211> <212> <213> | 6090 452 DNA Glycine max | | | | , | |
| <223> <400> | unsure at a | all n locat | ions | | | |
| ctgcagcttg | atttanatat | tatggtgtgc | gcttgttgta | acatgttatg | tttgctactg | 60 |
| atttttaatt | ctttgaccct | ttgaatgacc | aaattggctt | tcgatgtctt | catgagactt | 120 |
| gtagagaatt | ttatccttta | cattcaagca | ctggtatcat | gttatttgga | ccattacaac | 180 |
| ataatcaatc | cttaaagcat | tgcagttttg | ttatattgtg | aggacaaact | gacatctcta | 240 |
| tcttcatggt | cagtttcttc | caagatccaa | gccttatttg | cccatgactt | ctccataaaa | 300 |
| gatatatata | tctttctctt | agctttctac | aaccactgag | atcatcccaa | attcactttt | 360 |
| gtagctcaag | tagttttcaa | attattgcac | acatatgaaa | ctgtcaaggc | aaaccagcgt | 420 |
| ctttaacttc | aggctcagtt | ntgtccatga | tc | | | 452 |
| <210> <211> <212> <213> | 6091 416 DNA Glycine max | • | | | | |
| <223> <400> | unsure at a | ill n locati | ions | | | |
| tttagtaatg | atccactaac | ctagaattaa | aagaacttaa | ttccattaac | ctagggaatt | 60 |
| aaaagaactt | aatggctgag | tgtaattgaa | attgtggcaa | ccaaaagtca | cccccaacag | 120 |
| ccatcaagtc | agccaccatt | tggtctccta | aaaggcttat | gcctaggttg | ccaattaggc | 180 |

| ccttattaca | acttgaacta | aaccaaacta | aagccctttt | agttgattga | cccaaaacat | 240 |
|-------------------------------------|--|-------------------|------------|------------|------------|-----|
| atttttgatc | agccaacttt | acaaggattg | ggccattatt | tagaanaact | aaacactcta | 300 |
| aaattgagac | aaagtggtgc | catttagtcc | tcctccattt | gggccatgat | acaactcaca | 360 |
| accttggact | nttctccttg | aaacttgngc | ttgtattcaa | atagtatgga | caacac | 416 |
| <210> <211> <212> <213> <223> <400> | 6092 454 DNA Glycine mas unsure at 6 | x all n locat. | ions | | | |
| | | tntataatoo | gtatgatgt | | | 60 |
| | | | | aaatggttta | | 60 |
| atattaccct | gtccggattc | tttaaactat | acttggatgg | tagagaagtt | tattcgctga | 120 |
| tacctaatga | tatttttcat | gtgggtggtg | attgcagcct | gtcgagcttt | ataccaaacg | 180 |
| tggtcttcgt | ggtcgaataa | aagaacctgt | tggtacacat | ggtatgttgg | ttgttagaaa | 240 |
| cctttgccat | caattttact | aattaacatt | ctgacagcta | gttattttag | ggagaaaaca | 300 |
| gattatatgt | tgcttggtca | aagatttaca | tgtgcattcc | atgattctta | tagtgaccca | 360 |
| ttggtttgag | ctgttttctg | caatttcctg | cttgttttgc | tatcaatgtt | caaatatgtg | 420 |
| tggngtatat | gatattctga | tcatattcta | ttta | | | 454 |
| <210> <211> <212> <213> | 6093 463 DNA Glycine max unsure at a | | ons | | | |
| <400> | 6093 | ir i iocaci | .0113 | | | |
| atattgtata | tcatatcata | taaatatgat | taaacatgta | ggaaaagata | ttaaaactaa | 60 |
| aaagataacc | tacgacgtcc | cctcctccca | cactgtcctc | tgccactcaa | acattgcacc | 120 |
| acaaggtcac | aatcacgtgt | ctttgtcctt | cttcagaaag | aatataatgt | tcatttttaa | 180 |
| catttcttac | atattattta | tttttgctca | gaacattntt | taaacatgag | aatactttcc | 240 |
| tttttagtgt | acattcagat | aataattata | atatatgaaa | gagcagcagg | ctagatctag | 300 |

aacaacgtgc acacattcct cggtccagca catagcatat ttcagtgttt ccactgtcca 360

| gccggagacc | . aatcatotoa | cttaacaaac | : atccaaadt= | nagaagtgtg | tatagcaatt | 420 |
|--|--|--|--|--|--|--------------------------|
| | | | | | Latageaatt | 420 |
| aataatgtgc | aaccgactca | gtgtggatca | acaatatcaa | tct | | 463 |
| <210> <211> <212> <213> | 6094 421 DNA Glycine ma | x . | | | | |
| <400> | 6094 | | | , | | |
| acttgagtaa | cacacttgta | gtgttcaaaa | ttctagaatt | tgatattaat | tatgtttaag | 60 |
| aaaatatgta | tctaaaatat | ttaaataaac | tcaacatgaa | gcaactaaga | caaaaagtta | 120 |
| taaatatctg | caaaatgtta | tcaaacttaa | aatttgacga | cctttaagac | taaattataa | 180 |
| aaaaaaaaat | tagtattgat | gaatagaaac | aaaattagaa | gttgaagacc | aatcaattaa | 240 |
| tttcaataga | ggaattcttg | aaaggaaata | atgtgattct | ccaaatacga | gtagtcttgc | 300 |
| aacaaaggcc | atcacaaagc | ctttcattgc | ttgaatgaaa | ttaattattg | atgcaaacat | 360 |
| tatagcaaac | ataagatcca | tactatgcct | acaatgatcg | aaaaaaaag | agtaacaatt | 420 |
| g · | | | | | | 421 |
| <210> <211> <212> <213> | 6095 486 DNA Glycine max | × | | | | |
| <223> <400> | unsure at a | all n locati | lons | | · | |
| ctcagcttga | | | | | | |
| | ggattatggg | gtacccatca | catgtggtac | tangtggctg | tcgtgcgatg | 60 |
| gtgcacaaca | | | | tangtggctg cccaccatcc | | 60 120 |
| | gagttttcac | atgcacgatg | cgcgcataaa | | cctgttgccc | |
| acctccaact | gagttttcac gagctcacgt | atgcacgatg actcccacgt | cgcgcataaa agcccatatt | cccaccatcc | cctgttgccc | 120 |
| acctccaact gtccccataa | gagttttcac gagctcacgt atcctcccaa | atgcacgatg actcccacgt gcttccacaa | cgcgcataaa agcccatatt catccaagct | cccaccatcc | cctgttgccc tcaacaccgg caacccgcac | 120 180 |
| acctccaact gtccccataa aagctatcac | gagttttcac gagctcacgt atcctcccaa agtcaagcaa | atgcacgatg actcccacgt gcttccacaa aacagagcat | cgcgcataaa agcccatatt catccaagct atgcagaaac | cccaccatcc ctcgattctc aaacaacatt | cctgttgccc tcaacaccgg caacccgcac caccaaccac | 120 180 240 |
| acctccaact gtccccataa aagctatcac aacacagcta | gagttttcac gagctcacgt atcctcccaa agtcaagcaa attccactta | atgcacgatg actcccacgt gcttccacaa aacagagcat aagaccccag | cgcgcataaa agcccatatt catccaagct atgcagaaac taacaattcc | cccaccatcc ctcgattctc aaacaacatt tctgccgaaa | cctgttgccc tcaacaccgg caacccgcac caccaaccac tatgttaacc | 120 180 240 300 |

| atacat | | 486 |
|----------------------------------|--|-----|
| <210> <211> <212> <213> | 6096 372 DNA Glycine max | |
| <223> <400> | unsure at all n locations 6096 | |
| tgcagcttcg | ttgtcaattt cgagcgtctg gatatattat gtcccaaaat tggacatccg | 60 |
| tgtgaaaagt | tatgaccatt cgaatttctc gagagcttcc gtagttcaat ttcgagcgtc | 120 |
| tcgatatatt | atctccccga atcggacatc tgtgttaaaa gttatgacca ttttaatttc | 180 |
| tcgaatgctt | ccgtttttca atttcgagca tctcgatata ttatgtccag aaatcaaaca | 240 |
| tcagtgtgaa | aagttatgac cattcgaatt tetegatage tteegetggt caatttegag | 300 |
| cgtcttgata | tattatgtcc ccgaatcgga catctgtgtg aaaagttatg accattcgaa | 360 |
| tntcttgaga | gc | 372 |
| <210> <211> <212> <213> | 6097 408 DNA Glycine max | |
| <223> <400> | unsure at all n locations 6097 | |
| ntngacggac | tataccaagc tctaggaacc agggacggag aaagatctat atatatgctt | 60 |
| gctaatggta | gagagaggaa gactagagat ttggatcaag taaagtgtgt taaggatgaa | 120 |
| gaaggcaaag | tcttagtgca tgaaaaagat atcaaggaaa ggtggaaggc gtatttccac | 180 |
| aacttattta | atgatggata tggatatgac tctagcagtc tagacacaag agaagaggac | 240 |
| cggaactata | agtactatcg tcggattcag aaacaggaag taaaggaagc gttgaaaaga | 300 |
| atgagtaatg | gtaaggcggt ggggccagac aacataccta ttgaagtgtg gaaaactctt | 360 |
| ggagatagag | gtcttgagtg gctcaccgaa ctctctaacg aaattatg | 408 |
| <211> <212> | 6098 388 DNA Glycine max | |

| <223> <400> | unsure at 6098 | all n locat | ions | | | |
|-------------------------|-----------------------------------|--------------|------------|------------|--------------|-----|
| agcttatggn | gaaggacaca | ggtcttgact | gggatggtga | gaagaaaacc | attgcagcta | 60 |
| gtgatgaatg | gtgggaagcc | aaaattcagg | tatgtattat | tcaacgaaaa | tagagttttt | 120 |
| gtgtaggcca | ctcttttgtt | ttttatgtgt | gattcttgac | tttgcggcaa | aaattgaagt | 180 |
| tgcagactgt | tttttagaaa | cttgtgtcta | aaattttagt | tgataattag | gttggttatt | 240 |
| actctgttac | ttgttgcaat | tgaggtagtt | tacatgcaaa | gaaatgaatg | tgttgatata | 300 |
| gtgatgtttc | ttttaaaacc | taatgaaatg | gaaatttatt | ggcatgttnt | ttattactct | 360 |
| acttttattg | gctgctgcat | gtttatct | | | | 388 |
| <210> <211> <212> <213> | 6099 430 DNA Glycine max | K | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| ngtcgtgcca | tcaccattct | ggcctaaacc | catttcgggc | tcatacccat | ccctcagcat | 60 |
| aactcgggca | accatcaaga | aggcaccaga | tagacgcggt | tgcaccagag | gagccttccc | 120 |
| ataagcattg | ttcataattt | ctagcgcttg | aaaagatgtt | tccaatgact | cttctgtagc | 180 |
| ttccacatag | ggtgtagagc | atggacaact | cactagtata | tcttcttccc | cagacactat . | 240 |
| aatcagctat | ccttccacca | cgaactttaa | tttctgatgc | agcgttgacg | ggaccacccc | 300 |
| aacagaatgg | atccaaggcc | gacctagcag | gtaattgtag | gcgagggtta | tatccattac | 360 |
| atggaaggtt | atctgacacg | tatgtggccc | aatttgaatc | gggagatcga | tctctnctct | 420 |
| cacgtcacag | | | | | | 430 |
| <210> <211> <212> <213> | 6100 368 DNA Glycine max | | | | | |
| <400> | 6100 | | | | | |
| | gacttcagag | | | | | 60 |
| gctcgagcgt | tctacataag | gcgcattact | ctgcacagag | agaataggga | ccacaaatat | 120 |

| cttcagggaa | gtataccttg | ctagtgtcgc | cttgtgctta | gagctgactt | tcagcgtaca | 180 |
|-------------------------------------|--|------------|------------|------------|------------|-----|
| attcgaatac | : aacgttaaca | acataggtca | aaaggaataa | agaatgtcaa | gacaagacaa | 240 |
| tgtaagactt | tcctcttgtg | cactattgca | caaattgctt | actaaaccat | atatggacgt | 300 |
| tactttatga | tgattacttt | cagtacttga | ggattgagta | actcttgcta | aacttgtagc | 360 |
| ttaagcat | | | | | | 368 |
| <210> <211> <212> <213> <400> | 6101 370 DNA Glycine ma: | x | | | | |
| agcttataga | attacttgaa | attcaatttc | tgatcatact | taaaaatgat | tccttagcac | 60 |
| aagcactacg | taatttttta | tcatactgct | aattctattt | gaagcatttc | tttctatgtg | 120 |
| agacgatgcc | gcaagcagag | ctggaaatga | ggtaagactt | tctagagata | gccttcctaa | 180 |
| ctaaatcttt | tgatgggatc | ttctttagct | gaacctgagt | tcgattaaag | ttggcctgca | 240 |
| cctaagaata | accatttttg | acctctccca | ttgttcgagc | tacttcgtaa | cctctccttc | 300 |
| aaggatagaa | gctagaagca | gatagcagcc | atatggatag | gtattcaatc | gcttgcttta | 360 |
| aaaggtatga | | | | | | 370 |
| <210> <211> <212> <213> <223> <400> | 6102 443 DNA Glycine max unsure at a | | ions | | | |
| | atgcagcagt | aatgattgcc | cgagttatgt | tagggaacgg | ttacqaaccc | 60 |
| | taggcaaaga | | | | | 120 |
| | atggtttagg | | | | | 180 |
| | gcggtggtca | | | | | 240 |
| | gtagaagctt | | | | | 300 |
| | atgatgttcc | | | | | 360 |
| cagctgggaa | attggcgagt | ggaggaacgc | cccggcattt | acgcaacgag | cataatgtan | 420 |

| acctttac | gg ttntaaagct | cta | | | | 443 |
|----------------------------------|----------------------------------|-------------|------------|------------|------------|-----|
| <210><211><211><212><213> | 6103 393 DNA Glycine ma | x | | | | |
| <400> | 6103 | | | | | |
| tgccagct | ta aagctcatgt | catgcatctt | cttaatctcc | aacaaaaga | tagggctata | 60 |
| tatgaata | gt aatggaagat | cagactacac | actacagaaa | agaagaagat | tgaatcatga | 120 |
| tagttagt | cg aagaggatgt | tgccaaggtt | ctacaagtcc | tagttgacct | tgagcaatct | 180 |
| agcactaa | ag aaaatgaaca | agaactgaat | gcatccattc | ctaatattgc | tgccaaggca | 240 |
| ccaatcta | gg agtccactta | tgcaaagcag | tctcaagaag | tcacctctgt | ccaacaagag | 300 |
| gtcattgt | at actccagcaa | tccaaaagat | gttcttccaa | tcaactaccg | tgctcccagt | 360 |
| gcgatcac | tg aggaacacat | tcaagagatg | atg | | | 393 |
| <210><211><211><212><213> | 6104 413 DNA Glycine ma | × | | | | |
| <400> | 6104 | | | | | |
| tctcccac | ga gggctttgat | gttgtctcct | tcaacacatg | ttttatctta | agagcaaggg | 60 |
| ctaatcga | at cgtgctcata | atccttcttt | ggatcttagt | ccactcggtc | tcatttatag | 120 |
| aaaccaac | ct ttcatcttct | aatgtctgat | caagacctaa | ctgcatcaaa | atgtattgaa | 180 |
| tagtactc | tg tcaaatcata | aaatttattt | ttccatcaaa | caatggtatc | tcgaaccttt | 240 |
| gtgtgctc | tc gatcatagct | ttgataccac | tgttgggtaa | tcaacgctct | cacaaacaaa | 300 |
| aattactc | ac acccacaaag | gaccgtgaga | acacaataaa | gattacacca | tatgaaaaat | 360 |
| aataacaa | ac acaagaacat | aacatggttc | ggcacctctt | gcctatgtcc | aca | 413 |
| <210> <211> <212> <213> | 6105 382 DNA Glycine ma | | | | | |
| <223> | unsure at | all n locat | ions | | | |

| <400> | 6105 | | | | | |
|----------------------------------|-----------------------------------|-------------------|------------|------------|--------------|-----|
| atatgtacat | tactactatt | ttatacctta | tcaaagggat | aaatgggagt | tatttatgtt | 6(|
| gtaggagtat | cagaacaatc | tgtttctgca | gtgtggcaag | cagaatgatg | gtaatgccct | 120 |
| gtaaaattaa | aattatatgc | ctttgggtat | ttaagggagt | ttcttctagg | tggtgcaatg | 180 |
| aagcctacta | cacatggcca | gtgggctcat | ttagcttgtg | ccatgtggat | acctagtttg | 240 |
| gttgtgtatg | actttattca | ctctttntta | cccagtttgg | ntatttttac | caagtgtcaa | 300 |
| gatcatggac | atgacaggta | tagtagcatt | cttacaccat | aaggggaggg | caaaacattc | 360 |
| ttaacangat | aatttaagaa | tg | | | | 382 |
| <210> <211> <212> <213> | 6106 401 DNA Glycine max | k All n locati | ons | | | |
| <400> | 6106 | ili ii locati | 10115 | | | |
| tctacttatg | tggcagggcg | ggcttccttc | accttcttgt | ctccaacgcg | aactttgacc | 60 |
| attgttcttc | cttcccgcga | tgcttctttt | catgtctgcc | tgagtgggct | tatagcctaa | 120 |
| accatacttc | ccacgattac | cttgggtatt | tatcagtcta | gttatgccgc | cgttgttttt | 180 |
| tcctaaaccc | atcccgggct | cataaccgtt | ccccaacata | actcgggcca | tcattaccgc · | 240 |
| tgcatcggac | agactaggct | gcccaaagag | ggagtccacg | gaggaaatgc | tgaccacctc | 300 |
| aaaagactgg | anagcagttt | ctaacgattc | ttctgcggct | tccacataag | gcatggagga | 360 |
| tgggcagctt | accaagatat | cnttctcgcc | tgacacaatg | a | | 401 |
| <213> | 6107 557 DNA Glycine max | | | | | |
| <223> <400> | unsure at a 6107 | ll n locati | ons | · | | |
| caccgcgccn | cccgcgcccc | tacctncnct | ctctcttcaa | cgnncnccnn | ncccccaagt | 60 |
| catgtgctct | gagcgcctga | actcgctgag | acaganaaga | tccgatccga | tcagatattt | 120 |
| ttcctatac | tatgacggga | ctcttcataa | caasacsacs | caacactatt | taataassas | 100 |

| gagcttacac | aagagcattg a | actctctggt | aaacgactac | caaaatagtg | tcatcgaata | 240 |
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| cctctatcac | aaaggagttg a | agagagtttc | ctgaagaatt | tcctacggtc | ccatttgtcg | 300 |
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| ggaactccca | atccaaggga a | agagacgccc | tcctttcctg | taaacgttgc | gaagctaata | 420 |
| cccngacctg | ggaatgcaat d | cacgcggatg | gngctcgata | tagataagat | gaacatcttc | 480 |
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| anacccaagt | cctgaaggat t | aaactgctt | aaccaaaccc | aagttgtttg | gacaagaaaa | 120 |
| acatgttccc | accaggttta a | tccattttg | acgtatttat | caattttgta | gtatctcaat | 180 |
| agttaaatta | aaactaattc a | atattatta | taaacgttga | cctggttatg | ggattaatcc | 240 |
| ttgatcaaag | tttaatcaga c | ttgtcactc | tttcttaaga | atgtattttg | cgagaattaa | 300 |
| acttaagggt | gggtaagtag g | ccggcccat | cccgcgtaaa | acccgtccac | ataagttcgt | 360 |
| attggcaata | gattggacca g | tctgtcccg | tactcttaca | cggatntaaa | agaatggcct | 420 |
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cggctcacaa atggcggtga gctgcgatat gaatctggca atataattca agcgtcccag 120

| gaaacctcgg | acttgcctct | ctgtacggng | ttctggcatc | tcaaggatag | ccttcacctt | 180 |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| ttcggngtct | acctctatcc | ctttctggct | tacaatgaaa | ccaagcaatt | tcccttattt | 240 |
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| tgctttgcct | gagagtagcc | tattctgatg | ttgctactct | gttggcgctg | gtgagccact | 240 |
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| cagtaatgaa | ttgggggttg | tttgtttttg | taaattaaac | agcaagtaaa | tttgaattag | 180 |
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| aaaacaatto | ttcgacgatg | ttgttttggt | gaacaccatg | gtggttggcg | cggcattata | 180 |
| gtcacgtgac | : tcgaacaaca | ctcccatgac | ctcaaaagac | tgagttgtgc | gccctaagta | 240 |
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| aagttatgaa | acccttagta | ttaatagatg | tccataaatc | agaagttaaa | cagatcctgc | 180 |
| caggaatagc | acacaacagt | tctttactga | tggttttctt | cctctcatat | attctcaaca | 240 |
| tattagtctt | aaaagtattt | ctagaaattg | gttaattgag | gacacaaata | acttatcaaa | 300 |
| gcctgaaact | ctggatactt | aacaaaaatg | aagggcaaat | tacgcctaat | cattagatta | 360 |
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| gcctgaatca | gacctccgag | tgaaacatta | tgaccatttt | aatttctcga | gagetteege | 180 |
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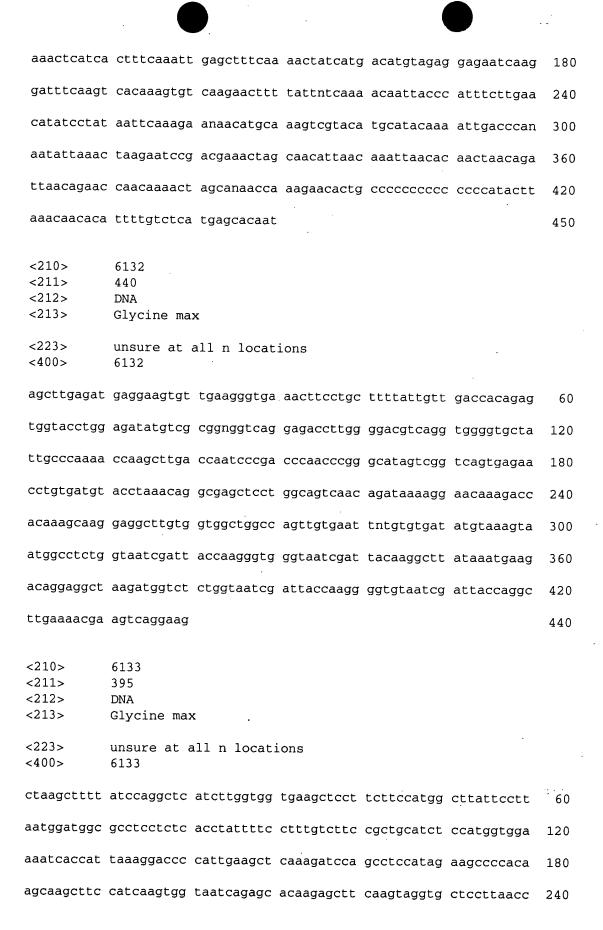
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| | | | | | | |
| agcttatgag | cganacaatg | cgactattat | atgttaagtc | gaatttcagc | gttcaaggac | 60 |
| tctggtaatc | gagtaccaac | acatcggaat | agatgacagc | ctgttgaaga | tatgaggaac | 120 |
| gttgcatgat | caggttgaaa | gcattttcta | gctcattctg | ctactagcga | tcgattacaa | 180 |
| caatatggga | gtcgatgacc | aaagtaactg | ctctctggca | aaggttgtgt | gaaaaactca | 240 |
| tgagctattc | aaagtgtgga | ataatgaaga | aatacttatc | atgat | | 285 |
| <210> | 6123 | | | | | |
| <211> | 124 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine max | | | | | |
| <400> | 6123 | | | | | |
| atgccccacg | ttatctacat | gagacatgtg | ccaaaccgat | tattgtgaac | ctgtacgcat | 60 |
| aacatgtcat | gcgtgcacct | atgatgacac | tccattgtcg | aagattgatg | gtcatgtgat | 120 |
| gcta | | · | | | | 124 |
| | | | | | | |
| <210> | 6124 | | | | | |
| <211> | 315 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine max | | | | | |
| <223> | unsure at al | ll n locati | ons | | | |
| <400> | 6124 | | | • | | |
| agctngaaga | caagactata d | cgaggtatct | ttcttgggta | tagcaatatc | tctaagggct | 60 |

| accgtgtcta | caacttgcaa | actaagaaac | tcgtcatcag | tcgagatgtt | gaagttgatg | 120 |
|---|--|-------------------|------------|------------|------------|-----|
| aatatgcttc | atggaattgg | gatgaagaaa | aagtggagaa | gaacgttctt | atactcgttc | 180 |
| aactacctca | agaagaagat | gaggaagana | acccaggtga | accaccttca | cctccatcac | 240 |
| aacaacaaga | agagatggag | tatccataca | gaannaattg | caccagtagc | tcgtcttaat | 300 |
| aagacaaagc | tcaac | | | | | 315 |
| <210> <211> <212> <213> | 6125 317 DNA Glycine ma: | x | | | | |
| | | ctacaaatgc | cactataaat | attagaataa | 202025000 | 60 |
| | | · | | | | 60 |
| | | agtttaccgc | | | | 120 |
| cttataagat | caaattgagg | tttattttgg | aatgttttgt | aacatcccat | tcttctgtaa | 180 |
| gataaattta | ataggattta | tttaaaattg | aatagagttt | taggaaaata | atgagatttc | 240 |
| tgtaattaaa | taaatcagga | gaaataattc | tattgattaa | aataatggct | tcagggaaat | 300 |
| acataaatat | atgttct | | | | | 317 |
| <210> <211> <211> <212> <213> <223> <400> | 6126 408 DNA Glycine max unsure at a | k all n locati | .ons | | | |
| agcttaatct | taatgatcaa | tcattaattc | acgagacatc | ttctgtttgt | ctcctgatca | 60 |
| tgcactgcag | aaaatctaga | agttgctgca | agaggttcaa | aataaatggn | gaaagctata | 120 |
| atgaactggc | catccacctt | gtcctcaggc | tccttttctt | cattttcatt | agcaggactg | 180 |
| tccttgtttc | cttctgctgc | atcttcctct | cctacaggct | tctcatcagc | aagaaccttt | 240 |
| tcagtttcat | tcaccacttc | ctcagtcacc | ctatgaaatt | aacatcaaaa | ggaacaaata | 300 |
| attaataact | gccaattaaa | aacatgagac | tcttggatga | aaattctaat | ctgaacttca | 360 |
| ttattattaa | nattaagaat | taanantatg | aatacaaaca | attactta | | 408 |

| <210> <211> <212> <213> | 6127 404 DNA Glycine max | |
|----------------------------------|--|-----|
| <223> <400> | unsure at all n locations 6127 | |
| ttgattcaag | atntcttcaa gatcaagcct tgcctcataa cgaaaggttt caagtcatcc | 60 |
| aaggcacatg | taatcgatta ccaatacgtg taattgatta ccaatgattt gaaagtgtgt | 120 |
| aatcgattac | tagagactct gaatgttggg aattcaaatt ttaaatgaag agtcacagct | 180 |
| gttcaagata | aataactatg taatcgatta cactaatgct gtaatcgatt agtggagagg | 240 |
| attttcaagg | aatatcgcca atagtcacat cttatcattt ggattttgaa tggccatcaa | 300 |
| aggcctatat | atatgtgtga cttgtgacaa aattggaaga gagttntgct ggtccagaat | 360 |
| gtcttatcct | ctcacaagaa aatgagagag attccaagag aact | 404 |
| <210> <211> <212> <213> <223> | 6128 413 DNA Glycine max unsure at all n locations | |
| <400> | 6128 | |
| agcttaactc | tcaaattccn cttcatccca ttctcttttg atataggcat tccttcatta | 60 |
| gggacaacaa | cctcagcacc aggtttgaca atatctgtca atgggatcat gagactcctt | 120 |
| ccgtccaagg | tggtgagatc caacgtttta ccagtaaggg cctcaagaag ggttatctct | 180 |
| tggttgatca | ccaaatcatt accatccctt ctataaagag catgcggctt ctcatctatc | 240 |
| acaaaaatga | gatctgctgg gatgacacca ggctcacggt tacctttctc tgggaaggta | 300 |
| atttttgttc | ctttcttcca gccaggtttt atctcgatag tcaaaatctc ctccacatcc | 360 |
| ccacatttgc | tgaaatggaa ttgcatgtgt caaatattgt caaaaaacac aaa | 413 |
| | 6129 431 DNA Glycine max | |
| <400> | unsure at all n locations 6129 | |

| tgcagcntga | a gatctcctgt | tctgtctgac | taccttccac | agtttatcaa | ccataaatng | 60 |
|----------------------------------|-----------------------------------|-----------------|------------|------------|------------|-----|
| taagagatgo | : ttatcatgga | attgtgccac | cttgttatac | tccactgcta | aaaaaattta | 120 |
| ccacataaag | ı agtagtagca | tgctgcaacc | acaagaaaac | ttattcaaat | gattttaaat | 180 |
| gtacaggtto | : ttaactttca | tagtaaataa | tacttaattg | tgtcagaatt | ttttaacaac | 240 |
| gtanaatgga | agaatttctc | ctatcaagga | atatctaatg | ccaaacagcg | aataacatgt | 300 |
| tcagaagtga | acaataacaa | atgatcaata | gaaggcgcga | gagaatatca | tttacacgtt | 360 |
| tcagattgta | attgttcacg | caacctttga | caaagaagca | tgtggggatt | accctttaac | 420 |
| tgatatttaa | t | | | | | 431 |
| <210> <211> <212> <213> | 6130 425 DNA Glycine max | ζ | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| agcttgtgca | aatcanatca | ctctcacatc | tcatctctag | catgcatttt | ctttctttac | 60 |
| ccactcctca | cgtttggttt | tttagggaaa | acaccataac | taaacgcgcc | gcaagggatc | 120 |
| cctatcgcac | cagatccaaa | tctagaacga ` | tgggtgatca | agaggagacg | caggaacaga | 180 |
| tgaaagccga | catgtcggct | ctgaaagaac | aaatggcctc | catgatggag | gccatgttaa | 240 |
| gtatgaagca | gctcatagag | aagaacgcgg | ccaccgccgc | cgctgtcagt | teggetgeeg | 300 |
| aagcagaccc | gactcccttg | gcaactacgc | accatcctcc | ctcaaacata | gtangacggn | 360 |
| gaagggacgc | actgnngcac | gatggcagcc | ctcacctggg | atacaaccga | gcggcttacc | 420 |
| cttat | | | | | | 425 |
| <210> <211> <212> <213> | 6131 450 DNA Glycine max | | ang. | | | |
| <400> | unsure at a 6131 | | | | | |
| atatgcatgt | gaattatgaa (| gcatcaacaa | gaatcaagcc | aaggctattg | tgcaagcaat | 60 |
| caatggggca | aaacacacca a | aatgattatg | atgatggatg | gctcaaattc | tcacaaaggt | 120 |



<210>

| tccattaatt | ttttttcttt | accttctctt | ccattggtgg | ttcttcatta | ttctccatgt | 300 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| atctcctcac | atgtcttgtt | ctaaatgttg | ttaacatgat | tctttagagt | ttccaccgat | 360 |
| taaacttgct | atagaagtta | gatttgattn | tctat | | | 395 |
| <210> <211> <212> <213> | 6134 359 DNA Glycine ma | x | | | | |
| <223> <400> | unsure at 6134 | all n locat: | ions | | | |
| gagtgacacg | ccgagaaaag | tttccatccg | tgccggtgat | ggttntcaca | acttgaaggt | 60 |
| aaattttat | ttattggttt | gggtttgatt | gggatgatta | tgcttaatta | tttggtgttg | 120 |
| actttgggaa | cattnttagg | agattaagac | tgtggaactc | atgaaggcaa | ctgggtgggt | 180 |
| ttatctatcc | ttgtctggag | ctcatcctan | gtaagtacag | tgttctttct | gtatccagtt | 240 |
| tttgttggtt | taagtttgta | tccaattttt | gttgtttgga | ggcctggatt | tttgttttca | 300 |
| acgaaatttt | gtgtgcatgt | tttggtagat | ttctagcata | gagtaaaaat | taaaagaat | 359 |
| <210> <211> <212> <213> | 6135 439 DNA Glycine max | × | | | | |
| <223> <400> | unsure at a | all n locati | lons | | | |
| ctcgcccagg | caagcagggn | tgcttcctcc | agaagcaaca | gccttctgga | ggaatcttct | 60 |
| ggagggccca | agtģggcctg | gttgctattt | gcacccccat | ttttactaag | tactccccc | 120 |
| tgcctttatt | ttggtgattc | ttttttcgta | cagttacgga | aacttacgaa | tttcgtaacg | 180 |
| atacttgttt | tctttccgta | atgttacgga | accttgtgga | ttacataatc | atccccttac | 240 |
| gaattgtgac | ttacggaatg | ttacggaacc | tcactaattg | tgcaacgatg | cttccatttg | 300 |
| atttccggcg | tgtcacggaa | ccttacggat | tgtgcatcaa | tattttcttt | tgttttctgg | 360 |
| cacgtccctg | aatttcacan | atggcctaat | gatgggtgcc | aagcacctta | caaggaccaa | 420 |
| ataatagtcg | catgtcatc | | | | . 🗸 | 439 |
| | | | | | | |

| <211> <212> <213> | 436 DNA Glycine ma | x | | | | |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|------|
| <223> <400> | unsure at 6136 | all n locat | ions | | | |
| agcttcccga | gtgtcccatt | gaaaaccttt | attcaacctt | tcanagttag | tgataaggct | . 60 |
| aaacgaaaaa | ttagggaact | tagaaaaact | aaatccttaa | ttgaaggcgt | aggtgacaat | 120 |
| catagcgaat | tactaaacaa | gattagtagt | ttgcttaagg | tcattccaga | tactccccaa | 180 |
| gcttcggaaa | atacttccaa | aatggtaaca | agaagtacct | ccaaattaat | taatgttatt | 240 |
| aatgaagata | gtgaccaaaa | cttagataac | acaactgaga | taggatcagt | gtcagaaaag | 300 |
| aatataaatc | cattaaactc | caaacactgg | aaaaccccct | ccaaattata | ttatcaacgt | 360 |
| ccaactgccc | ctgaccttct | attagaagaa | agagggtgaa | aacaatttaa | aatttttagt | 420 |
| gcaaataaca | tctatg | | | | | 436 |
| <210> <211> <212> <213> | 6137 510 DNA Glycine max | ζ | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| agggatgtgc | ctcgtgttgc | gacctataga | tactcagctt | gtcacctcat | agctaggttc | 60 |
| ttcattgtaa | tcagcctatg | ctgtggnagc | tagntgatga | gcactgcggc | cttagattat | 120 |
| taccatgtgg | atgaatggtg | gactctgagc | attctgcagt | gacaaagatt | cattacctgt | 180 |
| gaattgcaca | aatgatcact | tgggctaacc | gcatatacac | cgtctaggag | aaacagacag | 240 |
| agcatcacac | atcatgagct | cttntagcaa | catgtgcctt | cctgcaagct | aactgcaata | 300 |
| ctggcgctca | gctatgttag | attactcacg | ctgagcacga | gggtggaggt | atgccactgc | 360 |
| ttgatttcat | accaatatag | agactgtctg | tgcagataac | ggtacactct | accgaatacc | 420 |
| agggccacta | tactcgcact | ccagtgctat | tttggtatga | ctctagatga | cgcatatgac | 480 |
| atcgattgtt | cgagctagtt | atctcattaa | | | | 510 |
| <210> <211> <212> | 6138 441 DNA | | | | | |

| <213> | Glycine max | |
|---|---|-----|
| <223> <400> | unsure at all n locations 6138 | |
| agcttatgcg | catatttcct tacgaacgtt cacttgcaca agacatccta ttaactaaga | 60 |
| aaaatgcacc | catatacaat caaggcagct tcattaccta gattatttac atgtacttcc | 120 |
| aaggtgtatt | tgttatttac atcacacag tctccttggt taaatttaca tacatgcata | 180 |
| ctcaaagcat | tttggggtac caaaaattgc acgtgtgcac atcttggtat ttctaatacc | 240 |
| tatacataca | caaacttcat gatgaatett gactatetae acaataaggt getaegttte | 300 |
| atgctctttt | caaatttttg ctacctaaag tcgcatgcaa attcaagtat attttccttt | 360 |
| gctgactaan | antgtattaa aagggataca ttatttttgg aatgtatttt ctttacataa | 420 |
| catgcaacat | atttatatat a | 441 |
| <210> · · · · · · · · · · · · · · · · · · · | 6139 441 DNA Glycine max | |
| <223> <400> | unsure at all n locations 6139 | |
| gctcatattt | tagaagttat cacttctgtc aactctatga tgccttnttt gaaaaaggaa | 60 |
| aagagctatt | atttccctta gattgttcca aacattgtct agttatcctt ttagaagnta | 120 |
| atatgtgaac | taaagctttt attgtagtcc aaatttcata ataagggcat agccttggca | 180 |
| tctattctcc | gtaaatgatg ctttaacaaa ttaaagaagc attttctttt gacctgtatt | 240 |
| atttgttttt | ctgttcagtg ttcatttagc agaatgttat ctgtaataat aattaataaa | 300 |
| ttattctggt | gcaatatatg ctcacaatca aatgagaatc tgatacataa tgcattctaa | 360 |
| atagtataag | acatcaaata gtctgtgctt acagatccct ttggttacct aagtaaatta | 420 |
| gtgaaaaatt | atatttgtca c | 441 |
| <211> <212> <213> | 6140 376 DNA Glycine max unsure at all n locations 6140 | |

| agcttggati | gattcagcct | gactagggat | ctaggtttag | g taatttagac | : tacagtatag | 60 |
|-------------------------|-----------------------------------|--------------|--------------|--------------|--------------|-------|
| aacacaaaa | g catgattgat | tagagaaaca | a tctttacata | catcagctgg | ttcgttagaa | 120 |
| agacccaaca | a tatttaccta | ı ctactgttaa | ttttacttac | : ttgcattttt | attgtttta | 180 |
| gcctagactt | agtttaatto | tattttaaac | catcaattat | caatgtctct | tttaaaaatg | 240 |
| ccttatttct | gaatttaact | ctgtctaaga | ctagttccct | gagttcgata | ctcggattca | 300 |
| tccgctttaa | ttntaaatac | ttgaggatco | ggtgcgcttt | ccggcaaacc | aaatttccct | 360 |
| taaacatatt | tgcata | | | | | 376 |
| <210> <211> <212> <213> | 6141 412 DNA Glycine ma | x | | | | |
| <400> | 6141 | | | | | |
| tgtccgatgc | agcagtaatg | atggcccgag | ttatgttgtg | gaacggttac | gaacccggaa | 60 |
| tgggtttagg | caaagacaac | ggcggcataa | ctagcctgat | aaatgccaaa | ggaaatcgtg | 120 |
| ggaagtatgg | tttatgctat | aagcccactc | atgcggatat | gaagagaagc | atcgcgggaa | 180 |
| ggaagagcgg | tggtcaaagc | tcgcgttgga | gacaagaaag | tgaaggaagc | ccgccctgcc | 240 |
| acataagtag | aagctttata | agcgcgggtc | tgggagacaa | aggtcaagtg | gtcgcaatat. | . 300 |
| gcgaagatga | tgttccgagt | acattgtgat | tggtacgacc | atgccctcct | gatttccagc | 360 |
| tgggaaattg | gcgagtggag | gaaacgcccc | gcatttatgc | aacgagcata | at | 412 |
| <210> <211> <212> <213> | 6142 343 DNA Glycine max | ς | | | | |
| <400> | 6142 | | | | | |
| agcttgctta | agtccgtata | ttgaattctt | tattgtgcac | accacgtgtt | cttttccttc | 60 |
| aactgagaat | cccattgggc | tggtccatgt | acacattctc | ctctaaatct | ccattaagaa | 120 |
| agatatttt | cacatgcatt | tgatgtagct | ctaagtcata | ataggctact | agcgccatga | 180 |
| taattctgaa | ggaatccttt | cgtgacactg | cgaaaaatgt | ctctttataa | tcaacatcat | 240 |
| ctgtctgagt | aaaagtctta | gtaacaacag | ttggcctagt | aatgttcaag | gttgccatga | 300 |

| gagtcacatt | t tagtettaca gacecatgta caaccaacte tat | 343 |
|----------------------------------|---|------------|
| <210> <211> <212> <213> | 6143 334 DNA Glycine max | |
| <223> <400> | unsure at all n locations 6143 | |
| acgtgcacgt | t gattaagege attgetgtgt tatettgaaa accaateegg atat | agatca 60 |
| agttacactg | g aattatgacg taatttcact gttcaaacag tgctcatata tata | ataaca 120 |
| cacccatgga | a attetteegt ettgatteaa eaaacaggea teeettgaca taga | tatata 180 |
| aaaaaacatc | c acactttaat taattaactg ggcatataaa acccgnggta caga | ataact 240 |
| cgaataacca | a agacacagat gatagtatgc atcagtgtga tcatggttca agtt | cgaaac 300 |
| attgatgatc | gaaactttca tctccatgga atac | 334 |
| <210> <211> <212> <213> | 6144 374 DNA Glycine max | |
| <223> <400> | unsure at all n locations 6144 | er e |
| aacacaatca | a atatateeea aagagaaage aaacaatgga gatgaaette ataat | taaaat 60 |
| gcaaatgata | tatgagette aagagaatat gaaagaacag agagagaaac tteaa | agtctc 120 |
| aaacatatat | atatgtggct ttttctttga caccctcccc aatacacaca cacac | cacaaa 180 |
| aaaaaaaat | cttaaattga ggttatctgc atggctgcac aggacatctg aaago | caagtt 240 |
| ttttgccctc | tcaccctctc caattttggc aggtgcatta gagatttact aacta | atgtct 300 |
| agtacaacaa | aaaacaaata tgtcactgga tgaacaaaca ttacagatgt gttng | gagaag 360 |
| agcaaacact | atca . | 374 |
| <210> <211> <212> <213> | 6145 345 DNA Glycine max | |
| <223> | unsure at all n locations | |

| <400> | 6145 | | | | | |
|-------------------------------------|--|-------------------|------------|------------|------------|-----|
| agctnttaac | taanggctat | ttaaggtggt | tttatattt | actttntaaa | aaaaaaatcc | 60 |
| aataataatt | aatcacgtta | agaagggcta | ctatgaggga | ggtaaggaat | tgngtggaag | 120 |
| ggcaatggtt | tatagtgttg | gagatgaaga | gaaatttttg | tatggaaaaa | gggatctgtt | 180 |
| gggtaggatg | ttacatgagt | tataggaagt | gaggttgaag | gagaggattt | gataaatgga | 240 |
| cgtggaagaa | ggatcatata | aaatactata | gaggacaggt | gaggaaggag | tgacatggng | 300 |
| tggcacttat | cagcacatga | ggaataaata | tgttcctcta | aagat | | 345 |
| <210> <211> <212> <213> <223> <400> | 6146 418 DNA Glycine mas unsure at 6 | x all n locat: | ions | | | |
| tgtatacttc | cnncaattta | tggttattnt | gagagtaaat | ttgttaataa | atcttggtct | 60 |
| atgggtaatg | ttgtctttag | aatatttcca | ttggatttaa | tgatgatatc | tgtgcatttt | 120 |
| caggtgaaaa | agaagctaag | ttttgaattg | caaaaagtag | cagttgggct | aagcgcatat | 180 |
| ccaccgctaa | ggagaatctg | gcaaagcatc | agcatcagtg | cgctaagcgt | agcaggtgcc | 240 |
| ttcggccaag | ctaagtgcaa | gattggcgct | aagctcaatt | tcacttactc | acgctaagcg | 300 |
| cgagggtggc | gctaagcgca | acgtcatgat | ttcagagcct | atttaaagcc | tgtcttgtgc | 360 |
| agaattatgg | tacactttac | agaataccca | gggcacaaaa | ttccacagca | gccacagt | 418 |
| <210> <211> <212> <213> | 6147 343 DNA Glycine max | s. | | | | |
| <223> <400> | unsure at a 6147 | ıll n locati | ons | | | |
| agctatagga | tcaaaatctt | ttttctctct | ttntctctca | aatattgttc | attcttctcc | 60 |
| cacttttcac | ttatgttctt | tgttagtcat | catttacgac | taacttttgt | attgaaaagt | 120 |
| ttcatgaaat | ttatatcttt | ttcatgaaac | ttttgtattg | aaaagtttca | tgaaatttac | 180 |
| atctgctaag | cgaggcactc | agctcactta | acgagttgcg | agaatctgga | agagaatctg | 240 |

| tcattcatgo | atgcgctcag | cgtgccatca | gctccctcag | cgagtcattt | gtctcttctt | 300 |
|----------------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| gtgctaagcg | cgctagattg | ctaagcanaa | attcactaac | tca | | 343 |
| <210> <211> <212> <213> | 6148 506 DNA Glycine max | ζ | | | | |
| <223> <400> | unsure at a | all n locat | ions | | | |
| gccctggtta | tgctctgact | ccagagaaaa | cccctcggcc | cagagtagaa | ggtgcattta | 60 |
| cacttttctt | tttctatgta | cattgtatgc | ggacattata | aatagcaact | actactgcgt | 120 |
| catctctggc | ggactacggg | tattaaatat | tttatgatcc | tttcaatcca | catatígaga | 180 |
| ccttgtggac | gattgtgcac | gaaaaagtct | ttttaattag | aagaaaccaa | cgatgatttc | 240 |
| atccttattt | gtggtgaaag | aagcctactt | ttaactctct | actactaaat | ctgataacaa | 300 |
| gaagaaagac | tttctgttac | tgtcacaaaa | caaaaagact | ctttcgatct | actgcataag | 360 |
| atattaaagg | cctactccgc | caccactgca | tatctgagat | atgcgcactt | cttattattg | 420 |
| ggtgcttcat | ctcatggggt | ataataaata | atgacttgtt | tcatcctgac | aagactttgc | 480 |
| gacataaagg | atctgaagtg | atcccn | | | | 506 |
| <210> <211> <212> <213> | 6149 388 DNA Glycine max | | | | | |
| <223> <400> | unsure at a 6149 | ll n locati | ions | | | |
| agctntccca | caagtcctaa (| atgacattnt | atactaggat | taactcactn | tagactccaa | 60 |
| tttacactag | ccccaaattt a | agcttctcta | accctcaaaa | tctcactttt | ctacctacaa | 120 |
| cattgtcatt | ctcacattta a | accctaagtt | aactttcccc | ttcatctcta | ccagttttct | 180 |
| atcagcaatt | tcagcacaca a | aacatcacca | agcatcatca | taaaacccta | aaacagaatg | 240 |
| ggtaaatttg | gctcacatca a | aacatgacaa | gtttagcatg | ctttcaacaa | attccttcac | 300 |
| aaataactac | cataaggcat a | aaacttagta | gaactaccca | tcatatctcc | canaaaccca | 360 |
| atacccacga | aattcatgtg a | agaataag | | | | 388 |

| <210> <211> <212> <213> | 6150 426 DNA Glycine max | | | | | |
|----------------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| <223> <400> | unsure at al | ll n locati | ions | | | |
| atgcccgagt | cattcatccc t | atgagatgt | tgttgaagta | ttggcgacca | gaattgccat | 60 |
| tccttggatt | atatggttga a | accaagctca | tgtttttaca | aaaaggttca | tcaagtcaag | 120 |
| ttgaaatatg | gaagtaaccg t | cttgcacaa | ttggggcaaa | agatgaatcg | agtcacatca | 180 |
| ctgcttcgtc | tactgccaaa c | catatttagg | attattgatg | tccttgttac | ttccagtttc | 240 |
| accttgacaa | agatgtcatg g | gaccatgttg | aaaatctaaa | ttgattcaac | cccatatcct | 300 |
| gcgtaaaaat | tcgcaatact t | caactgtac | atcattcgca | tacatccatg | cttttcattg | 360 |
| gntgcattgc | tcattgcatt c | tttccttga | aaaataaaat | anaataaaat | aaaatgaact | 420 |
| taatca | | | | | | 426 |
| <210> <211> <212> <213> | 6151 370 DNA Glycine max | | | | | |
| <223> <400> | unsure at al 6151 | l n locati | ons. | | | |
| agcttctata | taagctgaac c | attntatca | ataaacacaa | gttgagtttt | attcagaaaa | 60 |
| ttagagttta | tctcttttat c | ttagtgaga | gtgattctcc | taaattcttg | agtgattcaa | 120 |
| gaacaccctg | gctgtatcaa a | ggactttca | caacctttgt | gtgttgccct | cgctggaaag | 180 |
| agtgattctt | tccttccttt c | atcttcacc | cttgttcttt | caaaccacaa | ttccagaaaa | 240 |
| tccacctctg | cccagaatta t | ctcgtggcc | ataactccca | ttttacgcac | tcaaattaag | 300 |
| tgattcttga | gcctaaattg a | atttcaaaa | cgagaccttt | cacctcgttn | tggaatcacc | 360 |
| tcatttggag | 7. | | | | | 370 |
| <210><211><212><213> | 6152 255 DNA | | | | | |

| <223> <400> | unsure at all n locations 6152 | |
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| tctcgatata | a ttatgcacct gaatcagact teegtttgan aagttatgae eatttgaatt | 60 |
| tctcgagago | c ttctgctgtt caatttcaag cttctcgata tattatgcgc ctgaattgga | 120 |
| cttccgtgtç | g acaagttatg accatattaa tttctcgaga gcattcgctc ttcaatttcg | 180 |
| agtgtctcga | a tatattatgc gtctgaatcg gacttgcgcg tgataagata tgaccatttg | 240 |
| aatgtctcga | a gagct | 255 |
| <210> <211> <212> <213> | 6153 433 DNA Glycine max 6153 | |
| · | | |
| | g acatgcctat tatattcttg ttaaacagag ctcatacatc tgtgagcatt | 60 |
| | g atgcaagate tttcatatge eccetagate ettettacea attgaagttt | 120 |
| | ggattgagaa ggtataatca tgaagaggag atacttaatt cactacagag | 180 |
| | g taccataaga tgatttttt ttttcacgca attatgaaaa ctactaaata | 240 |
| 4 | a agaataaaat gaaggcaaat agtacacagt acacacccat cttgccgtga | 300 |
| ttcgctccct | gagttcaaat tttggttcaa tggggcgtct tcctgtgaca agttcaacaa | 360 - |
| gcaaaactcc | aaatgaatac acgtcactct tttcagttag ttgataagtt ttcacgtatt | 420 |
| cagggtccaa | ı gta | 433 |
| <210> <211> <212> <213> | 6154 333 DNA Glycine max | |
| <223> <400> | unsure at all n locations 6154 | |
| ctaagctaag | ctggtatnta gcttattata gcatgattac tatgtcttat atatcaaata | 60 |
| tattctcgaa | gagttgctga acttatttat tcagaagtaa tagacattgt catgtctaga | 120 |
| aatgagataa | atgtaagaga cagataataa aatactgttt gcacataaag tatgtaatta | 180 |
| taatttttaa | tacacgcacg atttaccacg gatatgccta ttttatataa tagtaacact | 240 |

| tgtctaccat | tacatatata cacttgagat gtcatgggct attaatatca aacctatcga | 300 |
|---|---|---------------------------------|
| ggctgagctt | aactcagtca tataattgag ctt | 333 |
| <210> <211> <212> <213> | 6155 420 DNA Glycine max | |
| <223> <400> | unsure at all n locations 6155 | |
| ataacacgca | gagactaacg tegtettetg egacetteet caategegge egacaagett | 60 |
| gttgacatgt | tgagatttac gtcatcttcc gcgctcacaa gatctgtcat actgactttt | 120 |
| gagtctcgcc | gacggccgaa aatacccgag tggttatccg tataaacttt ttgttgtcta | 180 |
| taagacgaaa | agcctgatag cacgcagaga ctaacgtcgt cttctgcgcc cttcgtcaat | 240 |
| cgcggccgac | aagcccgttg acacgtggag atttacgtta tcttccgcgc tcacaagatc | 300 |
| tgtcatactg | acttttgagt cacgctgacg ggcgaaaata cccgagtggt tatccgtata | 360 |
| aactttttgc | tgtctgtaag acgaanagcc tgatagaacg cagagactaa cgtcgtcttt | 420 |
| <210><211><212><213> | 6156 432 DNA | |
| <223> <400> | Unsure at all n locations 6156 | |
| <223> <400> | unsure at all n locations 6156 | 60 |
| <223> <400> gtcagcgtga | unsure at all n locations 6156 ctcanaagtc agtatgacag atcttttgag cacggaagat gacgtaaatc | 60 120 |
| <223> <400> gtcagcgtga accgcgtgta | unsure at all n locations 6156 ctcanaagtc agtatgacag atcttttgag cacggaagat gacgtaaatc aacgggcttg ttggccgcaa ttgacgaatg gcgcagaaga cgacgttagt | 60 120 180 |
| <223> <400> gtcagcgtga accgcgtgta ctctacgtgc | unsure at all n locations 6156 ctcanaagtc agtatgacag atcttttgag cacggaagat gacgtaaatc aacgggcttg ttggccgcaa ttgacgaatg gcgcagaaga cgacgttagt tatcaggctt ttcgtcttac agacagcaaa aagtttatac ggataaccac | 120 |
| <223> <400> gtcagcgtga accgcgtgta ctctacgtgc ttgggtattt | unsure at all n locations 6156 ctcanaagtc agtatgacag atcttttgag cacggaagat gacgtaaatc aacgggcttg ttggccgcaa ttgacgaatg gcgcagaaga cgacgttagt tatcaggctt ttcgtcttac agacagcaaa aagtttatac ggataaccac tcgcccgtca gcgtgactca naagttagta tgacagatct tgtgagcgcg | 120 180 |
| <223> <400> gtcagcgtga accgcgtgta ctctacgtgc ttgggtattt gaagatgacg | unsure at all n locations 6156 ctcanaagtc agtatgacag atcttttgag cacggaagat gacgtaaatc aacgggcttg ttggccgcaa ttgacgaatg gcgcagaaga cgacgttagt tatcaggctt ttcgtcttac agacagcaaa aagtttatac ggataaccac tcgcccgtca gcgtgactca naagttagta tgacagatct tgtgagcgcg taaatctcca cgtgtcaacg agcttgtcgg ccgcgattgg cgaatggcgc | 120 180 240 |
| <223> <400> gtcagcgtga accgcgtgta ctctacgtgc ttgggtattt gaagatgacg agaagacgac | unsure at all n locations 6156 ctcanaagtc agtatgacag atcttttgag cacggaagat gacgtaaatc aacgggcttg ttggccgcaa ttgacgaatg gcgcagaaga cgacgttagt tatcaggctt ttcgtcttac agacagcaaa aagtttatac ggataaccac tcgcccgtca gcgtgactca naagttagta tgacagatct tgtgagcgcg taaatctcca cgtgtcaacg agcttgtcgg ccgcgattgg cgaatggcgc gttagtctct gcgtgctatc aggcttttcg gcttacagac atcanaaagt | 120 180 240 300 |
| <223> <400> gtcagcgtga accgcgtgta ctctacgtgc ttgggtattt gaagatgacg agaagacgac | unsure at all n locations ctcanaagtc agtatgacag atcttttgag cacggaagat gacgtaaatc aacgggcttg ttggccgcaa ttgacgaatg gcgcagaaga cgacgttagt tatcaggctt ttcgtcttac agacagcaaa aagtttatac ggataaccac tcgcccgtca gcgtgactca naagttagta tgacagatct tgtgagcgcg taaatctcca cgtgtcaacg agcttgtcgg ccgcgattgg cgaatggcgc gttagtctct gcgtgctatc aggcttttcg gcttacagac atcanaaagt aaccactcag ctatttcccg ccgtcagcgt gactcanaag tcagtatgac | 120 180 240 300 360 |

| <211> <212> <213> | 402 DNA Glycine max | |
|-------------------------|--|-----|
| <223> <400> | unsure at all n locations 6157 | |
| gttatgatag | ggaagggtca ctatgtactt cagctgttgc catcacaaaa atatatgata | 60 |
| cttggataag | acatcttgga acttgaaatc atgcatgcat tctctgtata caacaacaga | 120 |
| ctagggttnt | ctaattcctc aaccaacaat ataaagttgt ggtcatctga taatttggtg | 180 |
| aacgtgtatt | agttagcccg caatggttta tggatataaa agaggtttta ggacggattt | 240 |
| atccattata | tattgtggta atggatgttg gcaaagtgaa tgatagttct gtatgggttc | 300 |
| cacctatcat | aaatttggat gtcagctctt catagaatag ttngaaaaca ggaccgcatg | 360 |
| atacatcata | tatattgtat taaaagaatt tcaatgaata gt | 402 |
| <210> <211> <212> <213> | 6158 485 DNA Glycine max | |
| <223> <400> | unsure at all n locations 6158 | |
| ctcagcttgc | tttaaacttc tacaatcgcc gaccgccgaa gtagcaatta tgtttggaat | 60 |
| ttcgaatgtg | ccccatattg aaattaattc acatgattgt tacatgataa aaacatgctt | 120 |
| ctaaattctc | agtttcgctt gaatatcaca tatagttgaa ttattttta ttctattata | 180 |
| agagatattc | cattcaattg ttttgagccg gcaaacttat ttttcaacta tgcacctaaa | 240 |
| ttcgaacttc | aaaatcattg tacccaaata taaggcgttt aaataataag atatttctag | 300 |
| atgaattagg | cttgatagtt caacatgatt agtataaata ctacgtataa aatagaanaa | 360 |
| aaatctatac | aacgttggaa acctttggtg cttcctacat tntaaggaag tacttttcac | 420 |
| acgtgtggta | aacanaacga taganataaa atagagatca tgtgatagag tanaaacatc | 480 |
| atata | | 485 |
| <210> | | |

| <223> <400> | unsure at 6159 | all n locat | ions | | | |
|-------------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| tcactaatat | ttgaaatttg | ttgttctatc | ttctctaagc | tctttntctg | taaattttta | 60 |
| agttgtaaag | ctctttaaac | accttgtaaa | tcctgagaga | aaaatattca | gtgcttaact | 120 |
| tgtatatcct | tctataagac | gcttaagcta | ttttgtgtgc | aaaatatacc | cccaacaaat | 180 |
| ttgttgattt | ttttaagagc | tagaagtggc | ttttttgaga | aaaaatactt | tatggtgtaa | 240 |
| atcttaggca | taagctatgt | tgtaagagcc | ataagtggca | aggaaaaata | cttgtaactt | 300 |
| tntttaaagg | tactagaact | tggtgggttg | aaaaaccagg | acatagtete | aatggtagag | 360 |
| atgaaccaat | ataaaactct | ttatgtctta | catatttat | | | 399 |
| <210> <211> <212> <213> <400> | 6160 247 DNA Glycine max | ζ | | | | |
| | | | | | | |
| | ggaggaatct | | | | | 60 |
| | aaatacaccc | | | | · · | 120 |
| | atttcgtaac | | | | | 180 |
| attacataat | cateceettt • | tttgacttac | ggaatgttac | ggaacctcaa | taattgtgca | 240 |
| acgatgc | | | | | | 247 |
| <210> <211> <212> <213> | 6161 346 DNA Glycine max | : | | | | |
| <223> <400> | unsure at a 6161 | ll n locat: | ions | | | |
| agcttggcaa | taaaaaatga | acccgttggt | acctgttcaa | ccccaccctg | attntccttg | 60 |
| acttggagaa | gcaggtttga | gtttgggttt | aggtatgtca | cttcacccca | tatgtgtccc | 120 |
| gctaaaatcc | aatggggata | ggatttggtt | tcattnttcc | actcatgttt | tgtaaatctg | 180 |
| aatccacctt | gttgtgattc | ctacccccta | cggatatcat | aacataacgt | ctgaagaagt | 240 |
| taatatgaat | gaagacaatg | aagaaaaacc | aggtgtgttt | gaaaaaattg | attattttga | 300 |

| tgtcttcaat | acttctcagg tattaatata attntgta | tt ttatta | 346 |
|----------------------------------|-----------------------------------|--------------------------|-----|
| <210> <211> <212> <213> | 6162 394 DNA Glycine max | | |
| <223> <400> | unsure at all n locations 6162 | | |
| cggaccttaa | ccctaaccct attgtccaat ttcccatca | at atagttctct aaattagatt | 60 |
| tcaagcctac | aatccaaaca aacacggata ctaacctc | gc caagctgcgg cgccaagtca | 120 |
| agaaagcttg | tgtttcgctg gcgttcagct cgtcggcgg | ga catgtcggga gtccatggcg | 180 |
| ggcggcgagg | aacgcggagg ctgctggcgt ggagcgcct | c ctcttgcttc tgctgcttcc | 240 |
| tcgcttcttt | cggcgtcgtc gcttcaccgg gcacaaaat | cc tggatcgcta ctctcanata | 300 |
| acagcaacaa | aaacaacata tattacagaa caattgccg | ga aagaagagcg cgggcacgtg | 360 |
| aatgcgaata | agagaaagaa ggctcacagg ctga | | 394 |
| <210> <211> <212> <213> | 6163 433 DNA Glycine max | | |
| <223> <400> | unsure at all n locations 6163 | | |
| agcttctttt | ctagaccatg atcagtcatg ttttctggc | c gatgtccact gtcattnttt | 60 |
| tcgatcaata | tcggagaata atatttttt tgccgagat | g gtctaatgtt ttcctggccg | 120 |
| aataagtcga | aacatgccag tttctgaaca aacaaaagg | t cggttgagct cacacaaaaa | 180 |
| acctagccga | cctacgttgt aaatttttta tgcaacacc | a aaacaagaaa acttcctctg | 240 |
| tcgtaaaata | caaaacatta ttggctagcg agtgttttt | t taaagaaaat tgtgcaatgt | 300 |
| cggtcgaaaa | atatcagtcg gagctatttc aagttcgat | g tcggctattg agttttcaat | 360 |
| tcaatccgtg | aacgaaattt gcatgatgtc tgtaacgaa | a tgttcgatag gcctcatcct | 420 |
| gtgaagcttc | att | | 433 |
| <210> <211> <212> | 6164 427 DNA | | |

| <213> | Glycine max | |
|--|--|---------------------------------|
| <223> <400> | unsure at all n locations 6164 | |
| ctcagcttct | ttgtagacct cgatcggtca tctttccagg ccgtggtcta ccgtcanttt | 60 |
| tttcgatcca | tttcggggaa taatattatt ttgccgagat gggctaatgt tttcctggcc | 120 |
| gaataaatgg | gaaaatgcca gtttcggccg aaacgaagag tcggttgagc tcgcacaaaa | 180 |
| aaacctagcc | gacctacatt ttaatatttt tatgcaacac caaaacaaga aaacttcctg | 240 |
| tgccgtataa | aaaaaaaaaa aacattacat gacagcgagc gttttgaaaa acaaaattgc | 300 |
| gcaacgtcgg | ctgaaaaata tcagtcggcg ctctttcacg accgatgtcg gctattgagt | 360 |
| tctcaattca | atccgtgaac gaaatttgca tgatgtcggt taggaaatgt tcgatcggca | 420 |
| tcatcct | | 427 |
| <210> <211> <212> <213> | 6165 404 DNA Glycine max | |
| <223> | unsure at all n locations | |
| <400> | 6165 | |
| | | 60 |
| agcttgatga | 6165 | 60 120 |
| agcttgatga tcttcctccc | ggtaattgta atcagcacac tcacacacac tanaagccac aaaactaggg | |
| agcttgatga tcttcctccc ttgcatgtta | ggtaattgta atcagcacac tcacacacac tanaagccac aaaactaggg caaaacccat gtactgctgc tcccagnttt ccatttcccc ttcacctgtt | 120 |
| agcttgatga tettectece ttgcatgtta egettettat | ggtaattgta atcagcacac tcacacacac tanaagccac aaaactaggg caaaacccat gtactgctgc tcccagnttt ccattcccc ttcacctgtt tctactctaa tttctatcca tcataaaagc catcacgaca catccaaaac | 120 180 |
| agcttgatga tetteeteee ttgeatgtta egettettat caaactaact | ggtaattgta atcagcacac tcacacacac tanaagccac aaaactaggg caaaacccat gtactgctgc tcccagnttt ccatttcccc ttcacctgtt tctactctaa tttctatcca tcataaaagc catcacgaca catccaaaac cctaacaagt taaacaaaca aaacatttcc atgttccttt atcttac | 120 180 240 |
| agcttgatga tettectece ttgcatgtta cgcttcttat caaactaact tcacacaaaa | ggtaattgta atcagcacac tcacacacac tanaagccac aaaactaggg caaaacccat gtactgctgc tcccagnttt ccatttcccc ttcacctgtt tctactctaa tttctatcca tcataaaagc catcacgaca catccaaaac cctaacaagt taaacaaaca aaacatttcc atgttccttt atcttctac acggcaacac atcagcacat acatttattt aaacaagca gaaaccactc | 120 180 240 300 |
| agcttgatga tettectece ttgcatgtta cgcttettat caaactaact tcacacaaaa gccaatacaa <210> <211> <212> <213> | ggtaattgta atcagcacac tcacacacc tanaagccac aaaactaggg caaaacccat gtactgctgc tcccagnttt ccatttcccc ttcacctgtt tctactctaa tttctatcca tcataaaagc catcacgaca catccaaaacc cctaacaagt taaacaaaca aaacatttcc atgttccttt atcttctacc acggcaacac atcagcacat acatttattt aaaccacagca gaaaccactc tatcattata acccaacaag ggaagcaaat aggggaatca aatattagtt tgtcattttc taactgtagt gagatgttct ttta 6166 378 DNA Glycine max | 120 180 240 300 360 |
| agcttgatga tcttcctccc ttgcatgtta cgcttcttat caaactaact tcacacaaaa gccaatacaa <210> <211> <212> <213> <223> | ggtaattgta atcagcacac tcacacacc tanaagccac aaaactaggg caaaacccat gtactgctgc tcccagnttt ccatttcccc ttcacctgtt tctactctaa tttctatcca tcataaaagc catcacgaca catccaaaacc cctaacaagt taaacaaaca aaacatttcc atgttccttt atctttac acggcaacac atcagcacat acatttattt aaacacagca gaaaccactc tatcattata acccaacaag ggaagcaaat aggggaatca aatattagtt tgtcattttc taactgtagt gagatgttct ttta 6166 378 DNA | 120 180 240 300 360 |

| taacattta | at ttgttgaaca atttaagttg tttctttctt ttattatgta attcgaaaga | 120 |
|----------------------------------|---|-----|
| atgaaacat | ng tttaagttgc taaacaaaat gaaacatgtt gaaggacaac caacatagta | 180 |
| tattaatat | cc teettttttg etaaatagaa teatatgeta ettattgttg ggacaacata | 240 |
| tatttagat | g gtaatgtttt ttttgtggga aaataaatat gcatgtctta attcctcatg | 300 |
| cacatacco | ca catttatgat tntaattgaa tagattgatt tgttntagta atnttttaaa | 360 |
| ttatgataa | at gatcctat | 378 |
| <210> <211> <212> <213> <400> | 6167 362 DNA Glycine max 6167 | |
| agcttgtat | a gttccccaat ttatggttat tttggagtaa attttgtaaa taaatattgt | 60 |
| tctatggtt | a atgttgtctc tagaacattt ccattggatt taatgatgaa atctatgcat | 120 |
| tttcaggtg | a aaaagaggct aagttttgaa ttgcaaaaag taacagttag gctaagctca | 180 |
| gcagttggg | c taagcgcata tccaccacta agcgtagctt cagcgcgctt agcgcaaaag | 240 |
| agaatctgg | c agagcatcat catcaaagtc gcacgcttag cgcaagatca gtgcgctaag | 300 |
| cccagcaggt | gccttcagcc aggctaagcg cgagactggc gctaagtcca atttcactta | 360 |
| ct | | 362 |
| <210> <211> <212> <213> | 6168 366 DNA Glycine max | |
| <223> <400> | unsure at all n locations 6168 | |
| ntatagaaat | tcaaatggtc atgactcttc acacgaatgt ccgattcggt gaaataataa | 60 |
| atcgagacat | togaaatata acaacgaaag ototoaagaa attoaaatgg toataacott | 120 |
| | gtctgattcc gacacataac atatcgagac gctcgaaatt gaacaatgga | 180 |
| aactttcaag | aaattcaaat gatcataaca tttcacacgg atgtccgatt aaggcgcata | 240 |
| atatatcgag | acgctcgata ttgaacaatg gtcgatattg aacaatggta gctctcgaga | 300 |

| gactcacat | g gtcataactt ttcactcgaa tgtgcgattc ggagacataa tatatcgaga | 360 |
|-------------------------|--|-----|
| cgctcg | | 266 |
| | | 366 |
| <210> <211> <212> <213> | 6169 359 DNA Glycine max | |
| <223> <400> | unsure at all n locations 6169 | |
| agctatagaç | g ttgagtcttg tatcggttta atcgattaca actatctcat aatcgattac | 60 |
| attgttgttt | gagagaatga ctgatttatt caggagtctt ggctntaatt gattaccaag | 120 |
| atcgattact | taaggcatct aatcgattgc attgttcttg agttatttcc agatgttggg | 180 |
| atgaactctt | taatcgatta cttagataat ctaatcgatt aggtcattga attaatcgac | 240 |
| tatgctataa | atttaatcga ttacaagcag ttataattgt tttctctata aataaccagc | 300 |
| ttgagttcac | atctaagaat caagagatca atagaggatc ctccatacat ctcaaaaat | 359 |
| <210> <211> <212> <213> | 6170 332 DNA Glycine max | |
| <223> <400> | unsure at all n locations | |
| V400 > | 6170 | |
| ttacattgat | gtttgtattg atgggaggag gttacatgcc attgttgctt taagagtaac | 60 |
| gtcccactgg | taaaactaac tttccaaatg tttgccttcg caggaatggc cccgaggaat | 120 |
| cttgcctcat | agaggtccac gaaggacaag gtggccgaat gaactatttt cgccccggag | 180 |
| tacgacagtc | accgctttan gagcgttgta caccagcagc gcttcgaagc cattaatgga | 240 |
| tggtcatttc | tccgggagcg acgcgtccag ctcaacgacg acgagtatac tgatttccag | 300 |
| gaataaatag | ggcgccggcg gtgggcacca ct | 332 |
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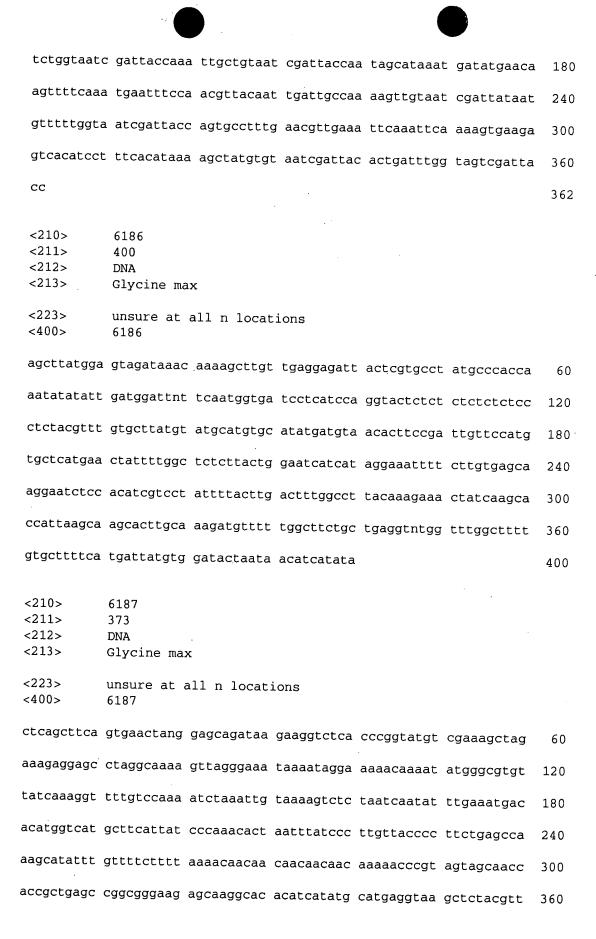
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| | solution of the second contagatal adalyticity tractitation | 120 |
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| | | |
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| _ | | 240 |
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| cccaaccag | y ttactaaatt atttgtcata cttaaatatg cccctatacc atattttaa | 300 |
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| | a sa | 360 |
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| gttntaccct | gaccaacact | tcaatcactc | cacatgacct | ggtaatggag | cggtcagcta | 180 |
| attgcaaagt | cattcgagtg | ggcataatct | ccaactctcc | cagccttctg | cacatggaga | 240 |
| gtggcatcaa | attaatagtg | gcttccagat | caatcat | | | 277 |
| | 6182 443 DNA Glycine max | | | | | |
| | 6182 | III n locat: | ions | | | |
| agcttgcgct | gcccgctaag | tgaggcgatg | cactgtgtct | gtcttgtgcg | ctaagcgagt | 60 |
| ctcctaatc | ttcattnttt | tcttcaagtt | tttgcatcaa | ttttcctcca | aagcacttgt | 120 |
| aattttcttc | ttttgaatct | tgctggtaaa | atattaacat | gatattaaat | ttctcattat | 180 |
| ctcattaaaa | acaatagtaa | agtaaaggaa | ttctaatcat | tgttagtcaa | aattaactgt | 240 |
| caattaaact | taaatttcac | agttatcagt | gccagcaaat | ttaaatttga | cactatgcac | 300 |
| ttgtaaggt | tacttcaacc | atgcccattc | ctcatgcagt | atgggaggat | ctctccttgg | 360 |
| ittttcatt | gccttgcctt | cttcccaagg | ctataccatg | atcctgaaag | cctcgttata | 420 |
| aatggtcaa | gggtactact (| ctc | | | | 443 |

| <210> <211> <212> <213> | 6183 407 DNA Glycine max | |
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| <400> | 6183 | |
| agtcgccact | tcattatggg taacttgacc acttggatat gcgcatggca ttgccctatt | 60 |
| gcactgtcca | ctactgaacg tgactctatt ccagctacta ctcgatgctc tcatatacta | 120 |
| | tgcttctcga gacgagctac acatccatga gagtaacatt gttaactatc | 180 |
| | gatgcgctac tatccagctt tctaaaaatc ctacattgca tctcatggac | 240 |
| | aattacagac taggtcatac agaaaccatg ttcaaaagca ccatgctaat | 300 |
| | cacccgttac taacgaatct ccttggaatg gactgtataa aggaatgatt | 360 |
| cattatctat | aggtgcgtca cattagcttt atgtcacagg acatatc | 407 |
| <210> <211> <212> <213> | 6184 337 DNA Glycine max | |
| <223> <400> | unsure at all n locations 6184 | |
| agaacgcatg | aacganaatg cttttcatgg tgctccgaan aagggttgag gatggagaat | 60 |
| cgcactaaga | aatcactacg catggctcca aactcgtggg tggaggacgc atgaacgaaa | 120 |
| acgcaattca | tggggctccg aaaaagggtt gaggatggag aatcacacta agcaatcact | 180 |
| | ccaaactcgt gggtggagga cgcatgaaca aaaacgcatt tcatggggct | 240 |
| | gttgagaatg gagaattaca ctaagcaatc actacgcatg gctccaaact | 300 |
| cgtgggtgga | gggcgcatga acgaaaacgc aattcat | 337 |
| <211> <212> | 6185 362 DNA Glycine max | |
| <400> | 6185 | |
| aagattcaag | attcaagaat caagagaaga cttaatcaag ataagtatga aaaggttttt | 60 |
| tcaaaaactg | agtagcacat ggctatttct caaaacatgt ttaccaaaga gattttactc | 120 |



| gggcaacaa | : gat | 373 |
|-------------------------|--|-----|
| <210> <211> <212> <213> | 6188 270 DNA Glycine max | |
| <223> <400> | unsure at all n locations 6188 | |
| catgagcaac | tangtgtgtc ctactatgac ttgagaaaca aaggtgatca aataacaagc | 60 |
| agagatttaa | aagttactag gttgcctcct agtagcgctt ctttaacgtc ttgagctgga | 120 |
| cgcttgatgg | cttgtcggtc acggacctag taccttgctt acctttggct ctggacttgg | 180 |
| tcgcctattg | ctcggccatg ggtcgtaagc aacgctctaa cctttttgtg gagagctgag | 240 |
| gtgaactcta | gaggtgatgg cggtgcgtct . | 270 |
| <210> <211> <212> <213> | 6189 395 DNA Glycine max | |
| <223> <400> | unsure at all n locations 6189 | |
| ntgtgtggag | cttcaatggt gaatgaggga ggaagaaaag caacgtgagg gagagggaga | 60 |
| gagagcttct | gaaaatgtgg ggctgagtga agagagagag agttgctttt tggttntaaa | 120 |
| taaaagggtt | ttctcttttt ccattatttt attcaagctc tgccacatgt ccctatatga | 180 |
| ttggagcaaa | aagggcccac tttctctttt tgactgtgac ccatacttag tcacaaaagt | 240 |
| gagaaaaatc | tgacctttga aacgctaaaa tcctgcctcg gtttgcgcgc cgtttctctg | 300 |
| attccagttt | ctcgcgtttc tctgcgtccg ccggggccag ttttcaaaag caagcaataț | 360 |
| atatatcaaa | acgctcagaa taaaaccccg agcgt | 395 |
| <211> <212> | 6190 252 DNA Glycine max | |
| <400> | 6190 | |
| cccggcaac | attgtttgta ttaatgaatt caacattatc cttgaatatc agtaaacgtt | 60 |

| tttgcttct | c tgcagcatcc ttatatacct tcccatattt cttcatccac tgctcatgtc | 2 120 |
|-------------------------------------|--|-------|
| tttcggaca | t ggatgcctca tggaggttgc gggacattac ttgggaagtg cacattgaga | a 180 |
| gaaggagca | c aagagctaaa atgtgctgct ttttgcccat ggaacccatg tcttttctca | a 240 |
| acaatgtat | c aa | 252 |
| <210> <211> <212> <213> <223> <400> | 6191 382 DNA Glycine max unsure at all n locations 6191 | |
| tatagaata | t ataatataag aacagtgact attgaagagt ctatacatgt ttcctttgat | 60 |
| gagcctaato | g ccattettge aaggaaggat tatttagatg atattteaga tteettagaa | 120 |
| gatacacata | a ttcatggaaa tgactctaaa gaaaaagatg aacgaagcaa tgaggattct | 180 |
| caagataato | g gggctagagg aaataatgaa cttccaagag aatggaaagc ctcaagagat | 240 |
| catccnctcg | g acaacattat tggtgatata tcagaagggg tcacaactag acattctctt | 300 |
| atagatttat | gcaagaatat ggctcttgta tctatgattg aacctaacaa tatgggagaa | 360 |
| gtcatagtag | atgataactg ga | 382 |
| <210> <211> <212> <213> | 6192 260 DNA Glycine max | |
| <223> <400> | unsure at all n locations 6192 | |
| acttgtagga | ttcaatntgg gaaaaattgg atgagggcaa gtgtgatttc gaaaatctgc | 60 |
| actttatgca | gaattttgct gtcaaatatg tgcagcagaa ttttggcttt gtgcagaaaa | 120 |
| tgttgtgtat | ttgttggttc tggaaagagt agtacagatt gggttctgga cgttttcttg | 180 |
| cagatcccaa | cggtcacaat gtaaacttat gtgctagaga ctttcagaaa aattttcaag | 240 |
| tcgatccaac | ggttaacgaa | 260 |
| <210> <211> <212> | 6193 414 DNA | |

| <213> | Glycine max | |
|-------------------------|--|-------|
| <223> <400> | unsure at all n locations 6193 | |
| tcacccttcg | toccaaactt agtocanact tatottottt taacttotoa toototagoo | 60 |
| ttcaccactt | ctctcgcacc tctatttccc atctccttcc tttcttttc gattccagtt | 120 |
| gctagtcatt | ataggatete cattggaget catgetteca agaagatata acatatgtea | 180 |
| acctatatct | aaacatgcaa tccaacttca tataaatttt ttcataaaat tagtaaatac | 240 |
| tcaacaaaat | atcatggtgg attattcgta cttccattat gatggttcgc ttatcctcta | , 300 |
| cgaccaccaa | aatgggtagt gagtcatata ccacctacat cttcctcact acctnctctc | 360 |
| tttgatgatc | agtaacttat ggcgtatgtg gtatggttaa gggtgtcatc attg | 414 |
| <210> <211> <212> <213> | 6194 633 DNA Glycine max | |
| <223> <400> | unsure at all n locations 6194 | |
| tcaccacttc | tccacnaaca tcttcctgtt tgtnnnngca nttcatatct ctccactaca | 60 |
| ctcctnntac | tcacaccccc cccgacaact ggggntgagt tcctgtcgtt gcagcgacnc | 120 |
| tnnanagtng | acctgcaagc atgcnaagct tctaccccta tntgtggcta tagaatgagg | 180 |
| ggttatgatg | tgtatataag aaaagcggcg ctcaacgctt tccttagggc gacatcctct | 240 |
| cttcctctcc | tgcgaanact tgctggagcg aaataatacc ttcctatgat agaaaaatat | 300 |
| catagcgcga | gggcgcttgc cgtaaccggt ttcgtgagtt attacgcaaa aattctcgac | 360 |
| cgttcttcaa | gattcatcgg tcggtcttcg tttgtttgag tcttcaacgg gtaaagacct | 420 |
| ccaaccgagc | ttttcaattt attctatgta cccgtggtcg gccacatttt cgttcatgta | 480 |
| ttgttattct | cggtgtcatt ctctatatat accccccttt gacgaggtaa gccatcattt | 540 |
| aaggatttct | cgcttaacgg aaaatacaat aacttcaccc atcgctgaat ggatcacccg | 600 |
| · taatccggta | caaagaatcc gaccgtcgcc tcc | 633 |
| <211> | 6195 451 DNA | |

| <213> | Glycine max | |
|-------------------------------------|--|-----|
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| atggaataa | t cctaggaata ttacaataac cgttttattg ataagaattg ctcagcagga | 120 |
| tcacaattc | c aagcaaggeg atetgggaaa ggatttgeag aagettetgt tttggeagga | 180 |
| ttcttcaaac | gaagtegtga aggtaagtgg geetetteae ettaegtttg ggetttaett | 240 |
| cgttatgcad | c cccctgtttt gtaattccca cctccgagct catctaagag ctcatctatt | 300 |
| gtgggaattg | ngaactggtc ttggaccatg acagcattga gggccctgta gtccatacag | 360 |
| aaccttcago | tcccatcatg tttccttaca aggaggacga gtgaggagaa agggcttgta | 420 |
| ctangttgga | tcaatccttt ttgaagcatg a | 451 |
| <210> <211> <212> <213> | 6196 312 DNA Glycine max | |
| <400> | unsure at all n locations 6196 | |
| acactatgat | actcagctta ccactgtccg gttactcctt gcccttgttg ctcttcataa | 60 |
| ctggcacctt | caacaattgg atgtaaacaa tgctttcctt catggngatc ttaacgaaga | 120 |
| ggtttatatg | aagetteete eaggaettat tgtggataat eecaacettg tttgtegeet | 180 |
| ttagcattcc | ttatatgggc tcaaacaagc cagtcgctaa tggttcacac ggctctcgtc | 240 |
| atttcttctc | tcccacagat tccgacgatc ttcagcagat cactcgttta tatatactct | 300 |
| gataatgacc | at | 312 |
| <210> <211> <212> <213> <213> <400> | 6197 371 DNA Glycine max unsure at all n locations 6197 | |
| aataggggga | gaagtgaaga agaaaggggt tcagcttctt aggcacttct ctctctcg | 60 |
| aaattgctga | ggaaaattag ttccatgaag aaaattcaag ccgaggcgct tccgtaacgt | 120 |

| ttccgtgagt | aattacgcga | agattctcga | a ccgttcttc | a agattcatc | g ttcgttcttc | 180 |
|-------------------------------------|---|-------------|-------------|--------------|--------------|-----|
| gttttcttga | gtcttcaacg | ggtaagtaco | tcaaaccga | g cttttcaat | t cattctatgt | 240 |
| acccgtggtg | gtccacattn | tgtttcatgt | attttatt | c tengttteat | tctctttnta | 300 |
| tacccccttt | tgacgtgttt | aagccattta | tttaagtcat | ttctcgctta | a atcntaaaaa | 360 |
| taaaataaat | t | | | | | 371 |
| <210> <211> <212> <213> | 6198 307 DNA Glycine max | | | | | |
| <400> | 6198 | | | | | |
| tattggcgat | cagaatagcc a | attccttgga | ttatagggtt | gaacccaact | catgctttta | 60 |
| ccacaaggtt | catcaagtca a | agttgaaata | tggaagtaac | cgtcttgcta | aattggggcg | 120 |
| aaagatgaat | cgagtcacat d | cactgcttcg | tctactgcca | aacatattta | ggattgttga | 180 |
| tgtccttggt | acttccaggt t | caccttgac | aaaacggatc | atgttgaaaa | tctaaattga | 240 |
| ttcagcccca | tatcctgcgt a | aaaattcgc | aatacttcaa | ctgtacatca | ttcgcatgca | 300 |
| tccatgc | | | | | | 307 |
| <210> <211> <212> <213> <223> <400> | 6199 428 DNA Glycine max unsure at al 6199 | l n locati | ons | | · | |
| | | | | | | |
| | ntatattaca a | | | | | 60 |
| agaacaatta | tgacctctcc a | gcaacaaat | acaaccctgg | atggaggaat | caccctaatc | 120 |
| tcagatggtc | tageceteag ca | aataacaac | agcagcctgc | tccttccttc | caaaatgttg | 180 |
| ctggcccaag | cagaccatac a | ttcctccac | caatccaaca | acagcaacag | cccctgaaac | 240 |
| agccaacagt | tgaggctcct co | cacaacctt | ccctcgaaga | acttgtgagg | caaatgacta | 300 |
| tgcagaacat | gcagtttcaa ca | aagagacca (| gagcttccat | ttagagcttg | actaatcaga | 360 |
| tgggacaatt . | agctacacaa tt | gaatcaac a | aacagtccca | gaattctgac | aagctacctt | 420 |

| ctcaagct | | 428 |
|----------------------------------|---|-----|
| <210> <211> <212> <213> | 6200 423 DNA Glycine max | |
| <223> <400> | unsure at all n locations 6200 | |
| gtgtctttc | a tatggctatg aataggaata gcactaatct cttccatgaa agccactgct | 60 |
| actccatcc | t catagtcaaa taggcgcctg ctccacttca gatcccagct ccaagtattc | 120 |
| tgagaaaag | tgcccatcct ggaaataaga tcattctgct gcttgctgat cagaaaaagc | 180 |
| tgattatato | g tetgetgaag gttgeagtee teeceeagee aattatettt eeaaaaeeta | 240 |
| attntttccc | cacatccaac cttccatccc atattctgat ggatagtact gaagtcattg | 300 |
| cgctgattta | a actitictaag atccctccac cattiagaat cccagcaatg gactctacca | 360 |
| ttttgtagag | ctgaccaccc ttcatggttg gaatttacaa ccctgaccca cagttgattc | 420 |
| tga _. | | 423 |
| <210> <211> <212> <213> | 6201 311 DNA Glycine max | |
| <223> <400> | unsure at all n locations 6201 | |
| agcttcttat | ccaaggctca tcttggtggt gaagctcctt cttccatggc ttattcccta | 60 |
| gtggatggcg | cctcccttct cctcttctcc tttgccttcc gctgcatctc catggtgaaa | 120 |
| aatcaccatt | gaaggacctc attgaagctc aaagatccag cctccataga agctccacaa | 180 |
| gcaagcttcc | atcatgtacc cctgccaagc actttggagg gccctcagtt ntgcccacaa | 240 |
| ccacaaccct | tgcatgttgc aatgggaaga atccctcctg ctatggcaga gaagggaaag | 300 |
| ttggatcata | t | 311 |
| <210><211><212><213> | 6202 85 DNA | |

| <400> | 6202 | |
|------------------|--|------|
| agcatgagag | ggagtcgcca cttcattatg ggtaacttag ccacttggat atgcgcaag | g 60 |
| caatgtccta | ttgcactatc cacta | 85 |
| <210> | 6203 | |
| <211> | 450 | |
| <212> <213> | DNA | |
| <213 > | Glycine max | |
| <223> <400> | unsure at all n locations 6203 | |
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| atggagttgc | tgcgaaagat aaaggagaag aggtgagcgg aggtgccatc cactagggaa | 120 |
| taagccatgg | aagaaggagc ttcaccacca agagtgtctt ggataagaag ctttgagagg | 180 |
| aagcttcaat | ggaggaggag aatgagagag aaagaggggg gcacgaaatt gaaagagaaa | 240 |
| aaaagggaga | gaagttgaac tttgaagtgt gtctcataag tttcacattc atcaaagttg | 300 |
| taacaagtgt | tacaaatatt tctatttata gcctaggtca ctaactaaat gaaattcact | 360 |
| ttcatttcat | gtgaatctaa gaggaatatt ccaaggatat gccanaggca tattagcata | 420 |
| ttccaaanat | atgccaaaga catcttaaca | 450 |
| <210> | 6204 | |
| | 375 | |
| | DNA | |
| <213> | Glycine max | |
| <223> (400> | unsure at all n locations 6204 | |
| cataaacaaa a | aaagaattgt gtggttgatt acacaatgac taacattata tcatcttaca | 60 |
| gacgaataaa d | caatttatgc acttagtett tteteteaag aagaacaaag tgttntgtga | 120 |
| gtttttttaa a | actttacaag aatttacaca aagaactttt acacaaagaa tgaaataatg | 180 |
| agcgcttcan a | attgtacttc atatcttcaa atcttttgtt ttatataggt ctctttcaat | 240 |
| caagtatttg t | tgtctctaa atagacatat ttcctctttt aagctcgcat ct gaana | 300 |
| tggtcattgg g | cattcgatg cacgtacttc ttcatgttga gaaaccaatt ntcatcgttg | 360 |
| gtgtgtgaac a | ctat | 375 |

| <210> <211> <212> <213> | 6205 386 DNA Glycine max | |
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| agcttgcca | c cattccagaa aatgacaatc tttctacaga ggaaaacact actaatgaag | 60 |
| | c ttttgttgat gctaataatc aaaacatttc caatgaagcc caagcaaaca | |
| ctgagcaag | a aatggagagg aagtttaggc ggtatgtata tgttatttta acatgcaggc | 180 |
| ataattaat | a tacacatatc aagaaaaatt aaaattaggg gcaaaatcat ttatgtatat | 240 |
| ttttttaaa | a caattgtctt taaatatttt gtgatttcaa tattaataat gaaaattaat | 300 |
| gttcgtctgt | t aaatttagtc tctaatcgtt tgtttttctg tagctacaac tatgaaaatt | 360 |
| attgcatgto | g tgtgtatcta atataa | 386 |
| <210> <211> <212> <213> | 6206 297 DNA Glycine max | |
| <400> | 6206 | |
| acagcagaat | aattatgacc gttcgagcta ctgatacggg ccatgatgga ggaattatcc | 60 |
| taaactaaga | tggactagtt ctttacaaca acatcaacct gtccctccgt tccagaatgt | 120 |
| tgctagtaca | agcaagcett atgtteetee tacaatgeag caacaacage tgteteetea | 180 |
| | gcaactgagg ctcctactca acctsa acctsas acctsas | 240 |
| gaccatccat | aatatgcaat titagcgaga gacatgagcc teegtteaga gaetga. | 297 |
| <210> <211> <212> <213> | 6207 317 DNA Glycine max | |
| <400> | 6207 | |
| | gtgcgtagcc caccatcttt tcatagtaga gtatcgataa tgtgtctacc | 60 |
| | tcgtctccct ttccatcatt gggggtacca cctgtgacgc cagatccctc | 120 |
| cacctttggg | gtgtgttctt cgaaagatcc gtccccttgt ttgcacatgt tctgtagttg | 180 |

| catcctatcc | ggaaccatat | cagaatagta | a ctgatactgo | c ctaacgaagg | g caaccattag | 240 |
|----------------------------------|-----------------------------------|--------------|--------------|--------------|--------------|-----|
| gtccttccaa | gtatggacto | gcgaaggtto | ctcgttaato | y taccaaggaa | cagctacccc | 300 |
| agtaagactt | tcttgga | | | | | 317 |
| <210> <211> <212> <213> | 6208 416 DNA Glycine ma | x | | | | |
| <223> <400> | unsure at 6208 | all n locat | ions | | | |
| ctcagcttgc | ttctacatat | gatgttctag | aataattgag | tatcaaatgt | ggtaatcgat | 60 |
| tatttcgtca | cagagagctt | ctaaatgttc | caagcgcaat | ctaatcgatt | actaaatgtg | 120 |
| gtaattgatt | atctagagcc | acaaagcctt | ccttcttcta | aaatgggtta | tattatcgat | 180 |
| tactaaaact | ggtaatcaat | taattcaatg | actttagtca | aatttcagaa | agaagttagt | 240 |
| tttgttgctt | gttctaacac | tgtgtaattg | attaaataac | cttgtaattg | attatactat | 300 |
| gttgaactca | ttatttctaa | gaaactttga | gatcnatcca | tctatctatc | tatcatgttt | 360 |
| gattcatgtt | gaaacttttg | gcaagcgtac | caattgttgt | ataggtttac | atttat | 416 |
| <211> <212> | 6209 350 DNA Glycine max | \$ | | | | |
| | unsure at a 6209 | ıll n locati | lons | | | |
| gctaagcgag | cttaactnta | tctattttct | tcataattcc | tgccgctcaa | gcactaanaa | 60 |
| tgactcgctn | gagaaaggca | tggcaatgtc | tcttcattct | gattatgact | tagcttgctt | 120 |
| aagcgcacaa | catgccacac | ttaagcgaga | aggctcagtt | tctttagctg | acttaaattc | 180 |
| ctataagaga a | actccatata | aacatcaaaa | agtctaanaa | acttcaaatc | ctaaggttct | 240 |
| tatgtaatta a | attattcata | cttcaaccta | atcttaaggt | agaacaaagc | tatatgtatc | 300 |
| ataaatgtca g | gataattacc | tcaaatcata | tgtgaaatta | agttctattt | | 350 |
| <211> 3 | 5210 379 DNA | | | | | |

| <213> | Glycine max | |
|-------------------------------------|---|-----|
| <223> <400> | unsure at all n locations 6210 | |
| tgctacccag | ctcgcccagg cgagctcagc tctaccaagc gaggtangtt gcttcctcca | 60 |
| gaagcaaccg | ccttctggag gaatattctg gaaggcctaa gtgggcctga ttgctatttg | 120 |
| cacccccatt | atttttaaat acacccctc gctttttttg gtgattcttt ttccgtaacg | 180 |
| ttacgaaact | ttacgaattt cgtaacaatg ctttttttc tttccgtaat gttatgaaac | 240 |
| cttacggatt | acgtagtcat ccctttgtaa cctttcagaa ggtacagaaa tttatgaatt | 300 |
| gtgcactaac | actttctttt aatttccggc atgtcacaga acttcacgaa tggcctaacg | 360 |
| atggatgcca | agtaccttg | 379 |
| <210> <211> <212> <213> <223> <400> | 6211 398 DNA Glycine max unsure at all n locations 6211 | |
| | | |
| | agccaatttc atcagagaag tcaggtactc tacttgactc gccatcgtcg | 60 |
| | aatggccaat ggcaagtggc gaatgtgcac caactacacg tatcttaaca | 120 |
| | tggagcgtcc gagttccaag tactgagctt cctggatgcc tacacatgat | 180 |
| | ccggatgcat gccctacatg aagagaaaat gacattcatc tttgaagatg | 240 |
| ccaacttctg | ttatagggtc atgccctttg gcctataaca tgtaagcact acatactaga | 300 |
| gagtgatgga | ccatantatt caatagcaaa ttggatgaaa tgtcgaggtc tgcgtcaatg | 360 |
| acatggtcat | caaatcacat accactagcc cacatgtg | 398 |
| <210> <211> <212> <213> | 6212 327 DNA Glycine max unsure at all n locations | |
| <400> | 6212 | |
| agcttatgct | cggatatcan aagtttcgtt atgagcaagg ataacttctt atgtacttgg | 60 |
| atgtagaana | aataacaata aagtaaatcc atgtttatgc tatgagaaac ttctcttata | 120 |

| attgtaaggt | tccatgaato | : taaggttttt | ataaacactt | tggtgaatgg | agaaaggtta | 180 |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| gctctaatct | atagcgtttt | ggctaaggaa | gactattcaa | aatctggggt | attattctta | 240 |
| agagactcaa | ctcttctaat | cttccatcta | ttggtggctt | ctcttccttg | caaggggctc | 300 |
| cttcaaatga | agatccttaa | atatacc | | | | 327 |
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| tctccacttt | acatccaacg | catgagttct | agtcaggata | agagcaggac | atcacaatca | 60 |
| ggacggattt | ctttcaaggg | gtatttattt | tctttatagt | ttagacaaaa | ttcagctctc | 120 |
| atttttgaac | tatacttact | taactgactg | ctaaaaaata | tattttgaat | tgaaagcttc | 180 |
| tgtgttttgc | atacatttga | ttcacaagat | atatctccta | ttgatttatt | gaagaatgtt | 240 |
| tcccttacac | atttaaactc | attatttgtg | cgtgaaatgt | tttccattct | attatagttt | 300 |
| aaaagggaga | tctctgagtt | ctgcagagga | gaagtccata | gttgaacctg | aggttttgat | 360 |
| gaccaaggaa | atagagtggt | ctaacaattt | | | | 390 |
| <210> <211> <212> <213> | 6214 383 DNA Glycine max | ĸ | | | | |
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| agcttccttg | ctagcctctg | actaccatgt | tctctgcttt | agtcattgac | attgccacag | 60 |
| aagactaaat | tatggacatc | caacaaacag | acccaccttc | aaaagtaaag | acatacctta | 120 |
| ttgtagacct | attgtaccct | ttaggtacct | taagatctac | ttcaatgctt | tacaatgttg | 180 |
| ctttcatggg | tcaaacataa | acttgcatac | ttgacttaca | atgtgtcaaa | tctgatttgg | 240 |
| tgcacactat | aacatacatc | aagcaaccag | ctgtactgac | atataagaaa | cctatgacat | 300 |
| gtactccacc | ttagtatctg | tcttcagacg | ttgatctaaa | aaaacttaaa | agtgttttat | 360 |
| ttcaaaatca | caagtggagt | tat | | | | 383 |

| <210> | 6215 | |
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| <212> | DNA | |
| <213> | Glycine max | |
| <223> | unsure at all n locations | |
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| | | |
| ntagatacaa | a atacagogtg tattottata ocagoagaat tttotgooac tgaaactoac | 60 |
| aagaattgtt | aattagaaat teecacaata tgaagtaggt gtgtggaaac atatacaatt | 120 |
| attatattca | agataacaag aaaagtatto aaggataagt tatotatott taatagooat | 180 |
| tcttttacta | tataattcat atgctggaca agtgtctatt ttttgctcat acattctgta | 240 |
| taggttggca | tcctttccaa aagttctacc ttgataatat attccatcaa ctacacataa | 300 |
| acccctaata | catcataagt ttgtccaaag tctcagactg gtgttcaatc attgctgaca | 360 |
| taccaatttc | aatggtcaca aagaagattg ccactatgga gaacaatgga cacaacttgt | 420 |
| tcttcagcat | tccatttaac ata | 443 |
| <210> <211> <212> <213> | 6216 399 DNA Glycine max | |
| <223> <400> | unsure at all n locations 6216 | |
| tacttatgtg | gcagggcggg ccttcttcac tctcttgtct ccaacgcgag ctntgaccat | 60 |
| cgctcttctt | tgccgcgatg cttctcttca tatccgcctg agcgggctta tagcctaaac | 120 |
| catacttccc | actatttcct ttggcattta tcaggctagt tatgccgtcg ttgtctttgc | 180 |
| ctaaacccat | tccgggttcg taaccgttcc ccaacataac tcgggccatc attactgctg | 240 |
| catcggacag | gcaaggctgc ccaaagaagg agtccacgga ggaaatgctg accacctcaa | 300 |
| aagactggaa | agcgggttct aatgattctt ctgcggcttc tacataaggc atagaggatg | 360 |
| ggcagctcac | caagatgtct ctctcgcctg acacgatga | 399 |
| <210> <211> <212> <213> | 6217 429 DNA Glycine max | |
| <400> | 6217 | |

| tatacagata | a tacatatttı | t ccagcaacat | cttgatggct | ctattcaata | a caacatacat | 60 |
|-------------------------|----------------------------------|--------------|--------------|--------------|--------------|-----|
| cacatggaaa | a tattagatta | a cagccagaca | ı caatgcatag | , atgctactgt | gttgggtgct | 120 |
| ttgctacatt | gccacatgat | tttctggtac | aagaactgtt | tggaggggat | caaattcaat | 180 |
| aaagaatgto | c cgaatcttca | a teggageaag | , ttcaaccacc | aacttcgtag | gatcaacagg | 240 |
| tcctcctctc | accaccttco | g gctcttcaga | ggagcettet | accttccaat | ctagcttcct | 300 |
| cttttccatt | tgagctcttt | cttgattagc | agacaaacto | atctctgtca | ctttattgat | 360 |
| ctgaaaagat | tgagtagtca | a aaaggaaact | atacatgagt | acatgatgtg | tgaaaaatac | 420 |
| taacttgga | | | | | | 429 |
| <210> <211> <212> <213> | 6218 440 DNA Glycine ma | ıx | | | | |
| <400> | 6218 | · | | | | |
| atcttcttgc | taagccaatc | tgctatctta | gtgagcgtcc | gctaagcaca | acactcatgg | 60 |
| | | | | | agcacattgc | 120 |
| | | | | | acgcgctaag | 180 |
| | | | | | gagcacgaac | 240 |
| | | | | | tgggattcag | 300 |
| agctttgcat | gtctagagat | tctagagaga | taaaggtcca | agttctagag | agttctgaga | 360 |
| gattttgctg | tgtgaagatc | tgtagagact | aaagctggaa | gcatgagccc | ggttgagagc | 420 |
| ttgagatgag | cttgtgagtg | | | | | 440 |
| <210> <211> <212> <213> | 6219 396 DNA Glycine ma | x | | | | |
| <400> | 6219 | | | | | |
| tcaatggagc | tggcatcatt | tactcagccc | cctcacgcct | atttatagct | taaaagggca | 60 |
| cttggtggac | ttgcaactcg | cccaggtgag | ttgttgcttc | actctaaagt | aacttggctc | 120 |
| gcccaagaga | gctggttact | tcaaccctaa | gccatttggg | ggcccaggcc | agccagaggc | 180 |

| tatccaaggo | gagccaaggt | ccaaaaaatt | gcttggaatg | , accettttad | ccctcccttt | 240 |
|----------------------------------|-----------------------------------|--------------|------------|--------------|--------------|-----|
| gggtattato | tgcatcctta | accaaaacgt | cgaacgatct | ttcgtcttg | atggtaaccg | 300 |
| atgtcgaacg | gcttaattcg | gctagcgaga | atcaaaatat | ccacgaatga | a tagtccctgg | 360 |
| acgaaattag | ggtctgacag | tagcaaagga | tatata | | | 396 |
| <210><211><212><213> | 6220 130 DNA Glycine ma | x | | | | |
| <400> | 6220 | | | | | |
| agaaactacg | ctgctaccat | ggagctccta | aatctcccac | actgttgttg | tgtccattct | 60 |
| tggatgacct | tgatgttgtc | agggtccact | tggaccccat | ttctaccaac | gacaaaccct | 120 |
| aagaaaaata | | | | | | 130 |
| <210> <211> <212> <213> | 6221 162 DNA Glycine ma: | x | | | | |
| <400> | 6221 | | | | | |
| aggctacaca | atcggagaag | aacttgacgc | ctgcacaagg | tgagagcata | ccgatccatg | 60 |
| cacacggccg | actccaggtg | ggaagagtcg | agcaccctta | cactagccac | tctttacgca | 120 |
| gatactcgag | catactcata | cgtgattcta | tgctcgcggg | CC | | 162 |
| <210> <211> <212> <213> | 6222 352 DNA Glycine max | ς | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | · |
| tcacgtactg | tctcgtgggg | ggtatgaact | gctngacaag | anacttatgg | aggagaagag | 60 |
| caagcgtgga | catgaggaac | attcgtgtac | tgaaagccca | acactcaacg | tcgacccacc | 120 |
| atccccagtt | gcaagacact | tgaagtggaa | gatcgcccgc | actaagcggc | atggccaaat | 180 |
| gacgtctgaa | ataacacaaa | aaattotaoa | Caaaattata | agttgatata | | 242 |

| tactgtcatt | ggcaaataat | ggttagctaa | cctagtcaaa | tttgttttat | tcaaattcaa | 300 |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| caattgtata | ı tgcatgcagg | attcattaca | ggaacaagca | acacagggga | gt | 352 |
| <210> <211> <212> <213> | 6223 443 DNA Glycine max | ς. | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| aaaggtgttt | tgatgataac | atatgatgac | aacanaagat | gatcacaaag | gtgatgaaca | 60 |
| aaaagctcaa | aagatcaaag | aacaactcaa | gtgaatcaaa | gaacatctca | agtgaatcaa | 120 |
| gaacaagtca | agagttcaag | aatcaagaag | aattcaagac | tcaataagaa | agcctagaat | 180 |
| caagaatcaa | gaagaattca | agactcaaga | agaaaaccta | gaatcaagaa | tcaagattca | 240 |
| agatctcaag | aatcaagatc | aagattcaag | actcaagatt | caagaataaa | gaaaagactc | 300 |
| aatcaagata | agtattaaaa | tttttttaa | aactttgaat | agcacttgag | ttttttacaa | 360 |
| aacctttacc | aaagagtttt | tactctctgg | caatcgatta | ccatattgtt | gtaatcgatt | 420 |
| accagtagca | aaatgacgtt | gag | | | | 443 |
| <210> <211> <212> <213> | 6224 307 DNA Glycine max | · | | | | |
| <400> | 6224 | | | | | |
| | ctagagetta | | | | | 60 |
| | tagaacttag (| | • | | | 120 |
| | ataatacaaa a | | | | | 180 |
| | ctaaaaccct a | | | | | 240 |
| gaaaaaccca | tactaatatc o | gacaaagata | agcgggctga | tacttaggcc | aaggcggtaa | 300 |
| aatctac | | | | | | 307 |
| <210><211><211><212><213> | 6225 370 DNA | | | · | | |

| <400> | 6225 | | | | | |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| gagaacaata | tctgtatgaa | cagagaagag | ctgtgtatco | acgaaaagct | gtttagcaca | 60 |
| agacaacaaa | ggagaaatcc | gcattagtaa | tatgagaata | aatacctaag | aacatgaagg | 120 |
| caatgcaaag | atagaaatgt | gtcaataaat | tacacagata | agcatgccta | aattatttaa | 180 |
| tcacgctgac | aaataagtac | tgtactacat | ttaatccgag | tataggtata | aactactgct | 240 |
| aattatacaa | attcatttgg | cttcctacac | agatatgcag | tagagaaatc | aacaattaca | 300 |
| tccgtctaca | cgtcagaaaa | agttaattac | cctagcaaga | actacatgga | aatccagctg | 360 |
| agcaagtagc | | | | | • | 370 |
| <210> <211> <212> <213> | 6226 180 DNA Glycine max | C | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| gaggttntga | ttgatcaaaa | agaagaanct | acttcatacc | gatatgccct | taggcacggc | 60 |
| aatacataac | atagaaatca | canctcgaaa | gggtggacca | atagctagag | cagcaggtgc | 120 |
| tgtagcgaaa | ctaattgcaa | aagaggggaa | atcggccaca | ttagaattac | cttctgggga | 180 |
| | 6227 477 DNA Glycine max | | | | | |
| | unsure at a 6227 | ll n locati | ons. | | | |
| nggtgtgtaa | tgatcatgag | cattgaaact | aagcttgcct | tggttagaca | tgattgtgta | 60 |
| catgattcgc | gacnggtagt | attcaatttg | cgaaaaattg | gatgagggaa | agagtggttt | 120 |
| tcgtaatccg | cctccaggca | gacaactatc | ttgaataaag | cggtggaata | aacctattgg | 180 |
| gcgaggcggc | ccaccgcgct (| catgaatcat | accccgggat | ggccgcccca | atctactcgt | 240 |
| gaatttnaga | aggggacata (| tttagatcaa | cgtcttcatc | tcctctctaa | acctctcgta | 300 |
| acattcact | ctccctacac (| ctctcccatt | tatccttcca | caccccccta | ctcacctcat | 360 |
| ccactotaa | catagetect (| cacttacact | aatocccaca | atattaat | | 400 |

| attctcctct | gatetetete tecaeteete etecaetaae tecaegetgg egetgae . | 477 |
|----------------------------------|--|-----|
| <210> <211> <212> <213> | 6228 440 DNA Glycine max | |
| <223> <400> | unsure at all n locations 6228 | |
| cttgtgtgta | aagagtcaca acttanaatt cttttttcaa gtctaaagag tcacaactct | 60 |
| ttagaaaaat | aattttgtaa tcaattacac cattttaata atcaattatc agtaaggaat | 120 |
| tttcaaaaat | aactcccaac agtcacatct attcaaatgt ttttgaatgg ccatcaaagg | 180 |
| cttatatata | ggtgacttgg gacacaaaat ttctcaagag tttttactgc acaaagagtc | 240 |
| tcatcctctc | aaaaactaaa ttatcttatc ctctaaaaca ttctttggcc aaacacttgc | 300 |
| aaattcaata | aggaatcttg agtgatcttc aattgttata tctttatctt anaagagaga | 360 |
| attcttcttc | ttcctcttct tattcaaaga gattgattaa gggaccgaga gtctcttgaa | 420 |
| gttgtaaaaa | ttcttgacac | 440 |
| <210> <211> <212> <213> | 6229 357 DNA Glycine max | |
| <223> <400> | unsure at all n locations 6229 | |
| gctacacaaa | tccngtctaa tagctaagct caccccatg cgcaaaaata catgaaaata | 60 |
| aaaaaaagc | tcctactaca aagactaccc aaaatgccct gaaatacaag gcttaaaccc | 120 |
| tataatacaa | gaatggccaa aatacaaggc ctaaaagaag gaaaaaccta ttctaatatt | 180 |
| tacaaagata | agtgggctca tacttagccc atgggctcga aatctaccct aaggctcatg | 240 |
| agaaccctag | ggccttccct tggatctctg gcccaattta cttagagtct tctatccaat | 300 |
| gcccttacaa | ggtagaattg catcagtagg gtcggtgctg cttaccctca acgatca | 357 |
| _ | 6230 317 DNA Glycine max | |

| <223> <400> | unsure at all n locations 6230 | |
|-------------------------|--|-----|
| agtaccaaga | a agagatacgn ctagcgacgt gttatgagca tataatcgcc gacgaatatg | 60 |
| cccaagtata | a ctcggaaaaa gaggctagag gaacggtgat tgactcttta caccaagagg | 120 |
| caaccatgtg | g gatggategg titgetetta eettgaaegg gagteaagaa ettteeegat | 180 |
| agttagccaa | a ggccaaggcg atggcagaca cctactacgc cccgaagaga ttcatgggct | 240 |
| tctcggctat | tgtcagcata tgatagactt aatggcccac ataattagca attcgtagga | 300 |
| tacctgtatg | gtctctc | 317 |
| <210> <211> <212> <213> | 6231 329 DNA Glycine max | |
| <223> <400> | unsure at all n locations 6231 | |
| taatatcacc | aggaactatc acattaacaa aatcacagcc tctaagattt cgacanatta | 60 |
| ttaggtagcc | ttgaagcatt atgtttttat gattctaatc taccattctc tntatatata | 120 |
| atacataact | atatttttta atttgtaatt tatttataat attcaattat gttatgtaaa | 180 |
| aaaatagtta | aaataattaa cattataatg attttagact atctaataat ttctagtaag | 240 |
| attttaatgt | ataacanacc tggaagcaca gaaggctacc acataatccg tcccagaaca | 300 |
| agtgaaaata | ctagttggat catcataag | 329 |
| <210> <211> <212> <213> | 6232 472 DNA Glycine max | |
| <223> <400> | unsure at all n locations 6232 | |
| ctacattcan | atgcaaggat aaaaagactt gattgaatgg acctctcatg gtctcaagtg | 60 |
| tgtttacaac | tcaataatca tataaccttc agataaactt tgcttaagaa acaaaaactg | 120 |
| aggtttgtaa | gttgtaaaag ttcattcaaa catttattgg atctgagaac acaaggtggg | 180 |
| tatatataga | gaaaatagtt ataaccatct gtaattgatt aaattggcaa tgtaattgat | 240 |

| tattacgtga | aagtaatcaa | ttatattttc | caattaatc | g attaaagtgt | tcttccccaa | 300 |
|-------------------------------|-----------------------------------|-------------|------------|--------------|------------|-----|
| ttctagaaaa | tataattgat | tattttcaca | taataattga | a ttacattgcc | aatttaattg | 360 |
| attaaagtgt | tcttccccaa | ttttggaaaa | cattcaagaa | a caatgtaatt | ggttaaagtt | 420 |
| ttcttaatca | cttctaggaa | cactntcaag | aatgatgtaa | tcaattacta | ta | 472 |
| <210> <211> <212> <213> <223> | 6233 469 DNA Glycine max | | | | | |
| <400> | unsure at a | ill n locat | lons | | | |
| ggtctctgcc | agtgaaagga | tcggtgtggg | tcttatataa | ggcaaattta | gtcatcctgc | 60 |
| ttggacgaat | gagaaaactg | gggcaaatga | agagggtgag | gatgaaggaa | aaacccatgc | 120 |
| tgtgactgcc | attcctatac | agccaagttt | cccaccaacc | caaaaatgtc | attactcaac | 180 |
| ccttctcctt | acctaccgcc | catttatcca | caaaggccat | ccctaaatca | accacaaagt | 240 |
| atgtctaccg | cacttccaat | gacgaacacc | acctttagca | caaaccaaaa | acaccaacca | 300 |
| aaaaatataa | tttgcagcga | agagcctgta | ggattcaccc | caaattctgg | tgtcatatgc | 360 |
| taacttgctc | ccatatctac | ttgataatgc | aatggtagcc | ataacccctg | ctaggttccc | 420 |
| tcanaccccc | atttttctga | ggatacgact | cgaacgcaac | atgtgcata | | 469 |
| <211> <212> | 6234 385 DNA Glycine max | | | | | |
| | unsure at a 6234 | ll n locati | ons. | | | |
| tgtctcagcg | tttatgcgag a | acagagacca | acatgttagc | tattatcgcc | aagtaccaag | 60 |
| aagagttang | tctagccacg (| gcccacgagc | atagaatcgc | ggacgaatat | gcccaagtat | 120 |
| acgcggaaaa | agaggctaga (| ggaagggtga | ttgactctnt | acaccaagag | gcaaccatgt | 180 |
| ggatggatcg | gtttgctctt a | accttgaacg | ggagtcaaga | acttccccga | ttgttagcca | 240 |
| aggccaaggc | gatggcagac a | acctactccg | ccccgaagag | attcatgggc | ttctcggcta | 300 |
| ttgtcagcat | atgatagact t | aatggccca | cataattaga | aatcgttagg | aaacttgtat | 360 |

| ggtctctcag | accttgacta gatac . | 385 |
|----------------------------------|--|-----|
| <210> <211> <212> <213> | 6235 215 DNA Glycine max | |
| <223> <400> | unsure at all n locations 6235 | |
| catatcgnca | cttaagcatc ggagtacttt gctctacaca gcccttcacc tcgtcgtaac | 60 |
| agagacatcc | atgcgagctc acgagtaaag tctgataccc cataaaggtc tgacacccca | 120 |
| tgttggtata | gtcaatacgg atctgccgag atctcatatt taggtatgaa caacgtgtaa | 180 |
| gttatttgcg | agctgcagcg agaagcctac attat | 215 |
| <210> <211> <212> <213> | 6236 449 DNA Glycine max | |
| <223> <400> | unsure at all n locations 6236 | |
| caatagtgat | ggtctaattg tcacttacat ctaanaatat ttatttcatg ttggcgtagt | 60 |
| gaacaatcta | ccgctatttt ggcattttgt cgtagcgaga aataaattca agttctatgt | 120 |
| taaggtaaat | agagacaaaa taatacccta atttatgtca tgtcttattt cttatttaag | 180 |
| atatttatgt | tttttttaca tacatatttt gttttctttc ctttcaattt cttcataatc | 240 |
| aaattagaga | aaagaaaaaa tccaataatt ttcttatatc attgaattta tacattaaaa | 300 |
| tatcaattat | gtgaatattg tgacacccat ttactacata gttaataatt aaataaacaa | 360 |
| tttatctaan | aatgaattat tgaatttaag actttcataa acatgtgaca aatgtcatca | 420 |
| catatgtaac | tcagatatat actaaaact | 449 |
| <210> <211> <212> <213> | 6237 479 DNA Glycine max | |
| <223> <400> | unsure at all n locations 6237 | |
| tataaagttt | ccagacacaa tctaatcgat tactaaatgt ggttattgtt atctcgagcc | 60 |

| acanagtct | t ccttcttcta | naactggctt | tataatcaat | t tactaaattg | ataattgatt | 120 |
|-------------------------|-----------------------------------|-------------|--------------|--------------|------------|-----|
| aattcgatg | a ctttagccaa | atttgaaata | a gaagtgactt | tagccaaatt | aagcaacaca | 180 |
| tacaccaat | t aaccccttgt | tcattaagca | a caaacataat | ttaagcacat | aggcaattaa | 240 |
| ttgaacacg | a agtgtgcaca | gattaacaga | atgcatgtgg | g gttaattggt | gaagggaaaa | 300 |
| ccgatagga | g agcaacatta | aaaatagaac | ctcanagaga | gttacgcttc | ttcctcagag | 360 |
| ggaaacaaca | a ctagaaattt | agccttccat | aagttcaatg | g aaagcagana | acataaatga | 420 |
| aactaaaggo | c agaaaacata | aatgaagcta | aaggcagaan | acaaaaatga | aactaaagg | 479 |
| <210> <211> <212> <213> | 6238 438 DNA Glycine max | ς | | | | |
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| atgttatcta | tatttgttga | atgtggtgct | ccataattat | aatcgtactt | catagtggag | 60 |
| atattttgct | ggacttggtc | ccgtgggggt | tttccacgtt | aaaaatatct | tggtgttatt | 120 |
| cttcttctct | tactctccga | atttatttt | cttattgccc | atctaaatca | catagagagg | 180 |
| gaaatttatt | cttggtattc | tccaacactt | atggtatgta | gagtataata | ccctagtgaa | 240 |
| agcaaatata | tgtaacaaaa | aaattataca | acaaacagat | agatggtcat | ttgaactact | 300 |
| tagcagtata | taatattctc | ctgtgtaccc | atagcaagca | cttgcctcct | actacttctc | 360 |
| acatgtcgca | cataacattg | tctaaacaca | tttatagagc | cactctttct | tataccacac | 420 |
| tgccttaatg | aagaagca | | | | | 438 |
| <210> <211> <212> <213> | 6239 230 DNA Glycine max | | | | | |
| <223> <400> | unsure at al 6239 | ll n locati | ons | | | |
| tctaactntc | taagttgtaa t | tgcagttca | gttatgatga | catcngatta | ttgcctattg | 60 |
| gtaatgacta | atgaatggta t | gcgccatgt | tttctttcgc | ggcggtggng | agtgttcaaa | 120 |
| cggcgccact | tataaagaag g | ggctaatgg | gctatatatg | catcagtgcc | tgcatctgct | 180 |

| ggatccaaat | tctatcatat catttttgct ggcacctttc tttctcgtac | 230 |
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| <210> <211> <212> <213> | 6240 399 DNA Glycine max | |
| <223> <400> | unsure at all n locations 6240 | |
| agtatgtctg | atcattaatg atacactatt tttcatacac attgtttcaa gcaatgacta | 60 |
| atttattcag | gtgtctctgc tttaatcgat taccatgtga tataatcaat tatttctctt | 120 |
| tctttaagta | attcagatgt ggacaaaaac actntaatcg attactatca gtatttaatc | 180 |
| aattacattg | ttcttgagtt ggttccagat attgggaaga atacttaaat cgattaacaa | 240 |
| gataatttaa | tcaattactt cattgaatta atcgattacc tcgtagattt aatcgattgc | 300 |
| aggcggttat | aacagtggtt tctataaata actagctttt gttacttaaa aaagaattgg | 360 |
| agggcttcaa | ataacaaata tggtctaatg agcaagatc | 399 |
| <210> <211> <212> <213> | 6241 400 DNA Glycine max unsure at all n locations | |
| <400> | 6241 | |
| acttaagtga | ttattttata attttaatag ataaatgact aaattatcag ttaanaataa | 60 |
| aagttaaaga | accaaatgag taatntaatc aaataattgt gatgtttgac aacactcaca | 120 |
| agacttatat | attgtaattn tgataattca ttaagatata atggataata ttaattcttc | 180 |
| tcactttttg | cattaaaaca ttctcactaa ttatttaatc ttttcttttt aacataaaag | 240 |
| gcaaaacctc | gctagataga gagagaggac ttaaatttgt gttgataaaa tttactgtga | 300 |
| agcttattaa | aatatttata aaaatcataa atcattttaa caagcttaac aaaatacata | 360 |
| ctcattatta | ctataatcaa ataagtttca tacaaactcc | 400 |
| <211> <212> 1 | 6242 459 DNA Glycine max | |

| <400> | 6242 | | | | | |
|---|---|-------------|------------|------------|------------|-----|
| gagagatett | cattctggtt | taattgatta | ctgattattt | gtttatcgat | tacactattc | 60 |
| agttgagaco | atgtctcatt | ttcatgagtc | tctactttaa | tcaattacca | agtgattgta | 120 |
| atcgattaca | tcgttcttga | aagtgttccc | agtagtgatc | aagaaaactt | tgatcgatta | 180 |
| aatcaagagt | ctaatcgatt | acattgttct | tgaaagcttt | ctaggtgttg | ggaagaacac | 240 |
| tttcatcgat | taaaaatgat | aatctaattg | attacttctt | taaaataato | gattaatgtg | 300 |
| gcaatttaat | cgattacatg | caattatgat | tgttttctct | atatatagco | accttgtgtt | 360 |
| ctcagctctt | acgactccac | attctagtct | tcattcctga | agcattcatg | gttaaagtga | 420 |
| gtcattaaca | tcttgtgaga | tcaagaagag | atccattca | | | 459 |
| <210> <211> <212> <213> | 6243 405 DNA Glycine max | er P | | | | |
| <223> <400> | unsure at a | ll n locati | ons | | | |
| agctcgccca | ggcgagctca g | gctagcccag | gcgagtatgg | ttgcttcctc | cagaagtaac | 60 |
| agccttctgg | agggcccaag t | tgggcctggt | tgctatttgc | acccccattt | ttactaagta | 120 |
| caccccattg | ccttttttt t | gtgattctt | ttttcgtaaa | gttacggaaa | cttatgaatt | 180 |
| tcgtaacgat | acttgttttc t | ttccgtaat | gttacggaac | cttgcggatt | acataatcat | 240 |
| cccctttttg | acttacggaa t | gttacggaa | cctcactaat | catconcttt | tttgatttcc | 300 |
| ggtgtgtcac | ggaaccttac g | ggattgtgca | tcaatatttt | cttttgtttt | ccggcatgtc | 360 |
| ccggaatttc | acaaattgcc t | taatgatggg | tgccaagcac | ctcac | | 405 |
| <210> <211> <212> <213> <223> | 6244 473 DNA Glyciné max unsure at al 6244 | l n locati | ons | | | |
| tttatcccta | taaacanact c | tatntttgt | attattaatc | ctttanataa | atcttattat | 60 |
| | maaaamaaat t | | | | | |

<210>

| atttgtcatt | tttaatagtt | tttaacattt | ttttaaacac | : tacttgaaat | aatatttta | 180 |
|---|-----------------------------------|------------|------------|--------------|----------------|-------|
| aaatattagt | ttctaacttt | tttatattt | ctttctttc | atccttaata | tatttatcag | 240 |
| tttttctact | tatcattttt | aaataaatca | taattttatt | attatttaat | tatttcaaca | 300 |
| attaatttta | ctaaacactt | gtaatttaat | aagtagaatt | ttcaattttc | aactaattgt | 360 |
| taatttacaa | attaaatttt | aactaaaatt | attgaacata | atttatatta | tcaggcacat | 420 |
| catcatcaaa | aaatttgaca | tganaataac | aaataagttt | tttttgaaat | ttg | 473 |
| <210> <211> <212> <213> <400> | 6245 277 DNA Glycine ma: | x | | | | |
| atggacttac | cttgaataat | tcctttgtag | tctctttgag | ccttgcttac | ctttccttgt | 60 |
| tttgaagctc | actacaagcc | ttaagtgaaa | aaccatgata | tcaccatata | cttaaggaat | 120 |
| tttggagctt | tggaattgct | ttgggaatag | agcgtggggg | gtttttgttt | tattggacaa | 180 |
| tttgttttgt | tggctatgct | tcatgatgta | ttctgcgcca | tacttgatgt | acattgtata | 240 |
| ttggttaaat | gctggacatg | ctgaatgaaa | tgttgat | | | 277 |
| <210> <211> <212> <213> | 6246 393 DNA Glycine max | ς | | | | |
| | | acatttccta | ttagatatgg | tcttattatt | 255 22 22 22 2 | 60 |
| | | | | gtcgcgactc | | 60 |
| | | | | aaatttttt | | 120 |
| | | | | acgtcgacta | | 180 |
| | | | | tgtattcatt | | 300 |
| | | | | aatactgata | | 360 |
| | ctacgaggga | | | | aaaaaaacgc | 393 |
| | | - 3 | 2 | | , | J J J |

| | · · · · · · · · · · · · · · · · · · · | • | | |
|--------------|--|----------------|------------|-----|
| <211> | 458 | | | |
| <212> | DNA | | | |
| <213> | Glycine max | | | |
| | · · | | | |
| <223> | unsure at all n locations | | | |
| <400> | 6247 | | | |
| | | | | |
| gaggtaccaa | togttgtctt togtcatgac ottgtaggat | at at agt at t | | 60 |
| 5-550-00- | - Joseph Control Control | gracectari | gngtgagaac | 60 |
| ttctaatctd | CCCCtaggtt gagttgaggg tgatgagg | . | | |
| eccuacccg | cccctaggtt cacttgaggc tcatgcacga | tgcccctcat | tgccccagtg | 120 |
| taaggettta | 200t 2000t - Table - Laber - L | | | |
| caaggeeerg | aggtaccaat cgttgtcttg ttttcatagc | ctcgtagtga | ggaagaatga | 180 |
| 22222222 | | | | |
| aayaaggagt | tgattcttgc aaaaagaatt ttttcaagga | cgagaaatag | ttgaaggatt | 240 |
| | | | | |
| tttcgatgga | ttaagtcaaa tgactcctat gtagaagcaa | gatgttttga | tgttntgatt | 300 |
| | | | | |
| atgccaaagg | atcaagtgct tccaagtttt attcaagaca | agaatccaag | aatccaagaa | 360 |
| | | | | |
| aatcaagata | tatgatcaag ttgatctcta gaatcttagg | aagaagtttc | caaattgaaa | 420 |
| | · | | | |
| aagcaaaagg | tttggccaaa gaattctatc taaatcat | | | 458 |
| | • | | | |
| | | | | |
| <210> | 6248 | | | |
| <211> | 390 | | | |
| <212> | DNA | | | |
| <213> | Glycine max | | | |
| | <u>-</u> | | | |
| <400> | 6248 | | | |
| | | | | ٠ |
| agcgcgtgca | tggtctttta tattgtaagg ctgcttgctc a | aaddaddaad | agaatgtagg | 60 |
| 3-5-5-5-6 | | aayyaycaay | ayaatgtagg | 60 |
| ctcáctgaag | ataggagaga aagaggaaga tattaggaat | | | |
| cccaccgaag | atgggagaca aagaccaaca tgttagccat (| catcagcaag | taccatgacg | 120 |
| aattatatatat | atataataa a aataa aa | | | |
| aaccycyccc | atctcctgac cgtgagcaca gagtggcaga c | cgattatgcc | cgagtgtact | 180 |
| | E | | | |
| cggtatatga | tgcttgagga agggtgatcg actctgtaca t | tcaataggca | ataatgtgga | 240 |
| - | | | | |
| tggacacgat | tcactcttac ttagaatggg agataagagc t | ttactctagt | gctagccaat | 300 |
| | | | | |
| gcctatgcaa | tggcggactc ctactcggac ggcgaggaga t | tcacagact | tcttatctgt | 360 |
| | | | | |
| tgtcagcata | tgatagacgt tgtgacccat | | | 390 |
| | | | | |
| | | | | |
| <210> | 6249 | | | |
| <211> | 269 | | | |
| <212> | DNA | | | |
| <213> | Glycine max | | | |
| | | | | |
| <400> | 6249 | | | |
| | | | | |
| ataataaccg | gaagtgcaac gatataagga cctagagcag a | ittagactaa | ggaagacaga | 60 |
| J | | <u>-</u> | Janugucaya | 00 |
| | | | | |

| | agattactac | : aatataattt | aaaggccaaa | ı aatattatta | a catctgcctt | aggaatagat | 12 |
|---|----------------------------------|-----------------------------------|------------------|--------------|--------------|--------------|-----|
| | gaatacttta | gggtttcaaa | ttgtaaaagt | gctaaggata | ı tgtgggatad | c aatacaagta | 18 |
| | acacatgaag | gcacaacaga | ı tgttaaaaga | ı tctacggata | acactctaac | c ttcgtgatat | 240 |
| | gaacttttac | gatgaatgta | ı ataaaagta | | | | 269 |
| | <210> <211> <212> <213> | 6250 400 DNA Glycine ma | x all n locat | iona | | | |
| | <400> | 6250 | all ii locat | ions | | | |
| | agaggattga | tggngacccg | gtgttgagag | aaacgatgag | ttggtctacg | tgggagtacg | 60 |
| | tgagctcagt | tggaggtggg | caacagggga | tgcgcggttt | atgcgcgcat | tgtggatgtg | 120 |
| | gaaagcttgt | tgtgcaccat | cgcccgaccg | ccacctagta | ccacatgtga | tgggtgcccc | 180 |
| | ataattctac | aagcttgaga | tgaagaagtg | ttgaagggtg | aaacttcctg | ctcttattgt | 240 |
| | tgaccacata | gtgcgacctg | gagatatgtc | gcggtggtca | ggataccttg | gggaccttac | 300 |
| | gtggggagct | attgcctcaa | accaagcttg | accaatcgag | acccaacccg | ggcatagttg | 360 |
| | gtcactgaga | acctgtgatg | tacctataca | tgcgagcttc | | | 400 |
| | <210> <211> <212> <213> | 6251 601 DNA Glycine max | ĸ | | | | |
| | <223> <400> | unsure at a | all n locat: | ions | | | |
| | cattttacct | tcacttcact | ctctcacact | ctattttttn | tcttnaatna | ttttntacnn | 60 |
| | ntnnncccnn | nncnnacgca | cccctctgc | gagtgaaccc | tgtanacacn | cacacttang | 120 |
| | anactactca | gcctgaggaa | ctatggaccg | ataagatacg | tgagtgncct | gtttaattcc | 180 |
| | tgaacagacc | gaccatcatg | aggggagtgg | attaccacta | ctggaaaacc | cctatgcaga | 240 |
| • | acattataga | agcaatagat | ctaagtcttt | gggaagccgc | aaaacaagga | ccatatgtgc | 300 |
| • | cctctataat | agccggaagc | gcaacaatag | aaaaacctat | agcagattgg | actgaggaag | 360 |
| ć | acagaagacc | aggacaatat | aatttaaagg | cccgaaaaat | tattacacct | gccttaggaa | 420 |

| tagatgaata | ı ctttaaggat | tcaaattagt | caactgcata | agatatgtgg | gatacaatac | 480 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| cagttacaca | ı tgaacgcaca | acagatgcta | cagatctagg | aataacactc | cacctccgaa | 540 |
| tataaacttt | gtcgatgaat | gtgaacaaac | tctcaagaca | tccgagacgt | tccacacatc | 600 |
| g | | | | | | 601 |
| <210> <211> <212> <213> | 6252 314 DNA Glycine ma | x | | | | |
| <400> | 6252 | | | | | |
| gctcgcgact | ggtacctttc | ttgcttgcgc | aacttgagtt | cactattgct | accccataga | 60 |
| gcttcgcgaa | atttgatccg | gtcatactct | tccttgcgag | ccctcttggt | ctcttgttca | 120 |
| agggctcttg | cggtaattgc | attctcttcc | cgtaacccgg | cacactcctt | accaacgtgt | 180 |
| gtagcggcca | acttgaactt | ctccttggaa | gttgtgcctt | ttctaactcg | cttctgagag | 240 |
| cttggacttc | ttcgaccaat | tccggtgctt | cacaactctc | tatgctgacg | acttttaact | 300 |
| tggcgagcca | atct | | | | | 314 |
| <210><211><212><213> | 6253 417 DNA Glycine max | | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| agctgattta | gaggtttaag | gggtcaaaat | cgagctacan | agtctctatc | ctacactttg | 60 |
| aaaatttcaa | ttgtggcatt | tgagctctag | ttntgtgttt | agtggcccaa | tggtagtttt | 120 |
| aattggtttt | tagttaacta | aagtctcgtt | cggngtggtt | gtgagtttct | ggttttcagt | 180 |
| taactaagtt | ttaatcttta | ccctaacatt | tactttccct | tcccctttga | cgttgactat | 240 |
| ttctttcatg | gtgctcacac | ttgctgctat | ttccctctct | ttgttgatat | actctggtca | 300 |
| tcatcgttgt | cgctagccaa | tcggtgacgg | tcatcatggt | tgttggttgt | tgggatcttg | 360 |
| tcttgctcct | cacctcacta | ttttccctca | cgttcttact | tttccttcat | gtttcta | 417 |
| <210> | 6254 | | | | • | |

| <211> <212> <213> | 387 DNA Glycine max | |
|-------------------------|--|--------------|
| <223> <400> | unsure at all n locations 6254 | |
| tctctattat | gctgtcaagg attctattat tacactgctc agaagttctt aaatggataa | 60 |
| tataaaaatg | caaaatattg tacaaggtag aacttettat ttaacacata atgttaagaa | 120 |
| ttaagctgga | ttcttactgc agattatttc atcttccttt cctggtattt ttataactag | 180 |
| aactgattct | tcttttttat aatattgcaa gctaggttgt tgaaaatgga acaggtttgc | 240 |
| acactagaag | tttggccaaa aagagagcca gtcctttntt atctaccatg gtccatggca | 300 |
| actttgttaa | tgtttctaga atggacattc cgatcaaagc attggaccat acatngctag | 360 |
| aattgttgaa | tgacagataa tactagt | 387 |
| <210> <211> <212> <213> | 6255 442 DNA Glycine max | |
| • | | |
| | caagaaagat gaatggaagt gtgagtgtga ctcataaaga cgay ttggt | 60 |
| | tgacatggaa ggatgtgtgg gtgacagctt ccaatagaaa gaatggc c | 120 |
| | ttcaagggct aactggttat gctaagccag ggcaactctt ggcaataatg | 180 |
| | gctgtggcaa atcaactcta cttgatactt tagcaagtat atacatcatc | 240 |
| | aagettetga ggtetgaata ateteetgea tgatagtgga teeettataa | 3 0 0 |
| gcttcaaaca | actitightat toaactatat tattaaatgt tagctttttt tot a | 360 |
| gagtagccta | aatattttac tatttattaa catatgagat acgacctcac caatctacla | 420 |
| aagaagataa | atttgaacta ac | 442 |
| | 6256 145 DNA Glycine max | |
| <400> | 6256 | |
| aactacgctg | aatcggccta gtggaaaagt gcgaccattg aatttctatg agcttccgcc | 60 |

| ttcaacttcg | tgcggtttat atgtgagt | cg cccgaaccg | c acacccgaga | taaaagcgaa | 120 |
|----------------------------------|---|---------------|--------------|--------------------------|-----|
| gtgcatttca | gaaagactag agcat | | | | 145 |
| <210> <211> <212> <213> | 6257 390 DNA Glycine max | · | | | |
| <400> | 6257 | | | | |
| cacaagcaga | ggcagataga agttgatto | gg atcctttatt | taattattct | ctagatttga | 60 |
| atatcacctt | ttcaccatca gagttgaca | ıg tgtcattgtt | cgacggttgg | caagtgcacc | 120 |
| ggatctcgca | agtagtataa aacggtaag | ra actgagtato | gaactctcgg | ggaacttgtt | 180 |
| ttacttggta | aagatgtggt tcagtaagt | a agcgtcttgt | tataaaaggt | ttatgtgtag | 240 |
| tatggacaca | tgtgtaaact aactaaaca | a aggtaaataa | aaggtgagca | gtggtgggtg | 300 |
| cgaaggtaga | tggtcaacat gttggtctt | c ctactaggcg | actgatgcta | ctaaagatgt | 360 |
| tctctaccta | acagtgttct tgtgttcta | t | | | 390 |
| <210> <211> <212> <213> | 6258 378 DNA Glycine max unsure at all n loca | tions | | | |
| <400> | 6258 | | | | |
| | aaccaaaccg atgagagtg | | | | 60 |
| | tctttgcatg aatctctga | | | | 120 |
| | atgattgcac atacacaag | | | | 180 |
| | tttgcaccct ttttgagct | | | | 240 |
| | tatctcaaga taccttgtt | | | | 300 |
| aatatacccc | agatttgggg gagtggaac | t aattgggatg | cacagaataa | gattaagcat ^{r.} | 360 |
| cggcacacac | aacacata | | | | 378 |
| | 6259 228 | | | | |

| <213> | Glycine max | | | | |
|-------------------------------------|--|-------------------|------------|------------|-----|
| <223> <400> | unsure at all n 6259 | locations | | | |
| aacttcctgc | tnttaaatan tatca | acagag aggnacctgo | agataggacg | cgttttatag | 60 |
| gagacctcgc | ccacgccagg tggcg | gtgcta ttgcccaaaa | ccaagcttga | ccaatcccga | 120 |
| cccaacccgg | gcatagtcgg tcagt | gagaa cctgtgatgt | acctaagcag | gcgagctcct | 180 |
| gntagncaac | atattaaagg aaato | acgac cacacagcac | gtacgett | | 228 |
| <210> <211> <212> <213> <223> <400> | 6260 385 DNA Glycine max unsure at all n 6260 | locations | | | |
| tggaaaatct | gggacttagc catgg | tagaa ngtccttctt | ttccattgcc | tccctcgccc | 60 |
| agtaggatga | tcatccgttg aggtg | cttca ctctcggnga | cttccagcta | tcacccatgg | 120 |
| tggaagaatt | cgaagaaatc ctagg | atgtc ctctaggggg | aaggaaacca | tacctcttct | 180 |
| cagggttcta | tccctcatta gctag | aattt ctaaaatagt | ncaaatctca | acgcangaat | 240 |
| tagaccgcca | aaagcaagtc gaaaa | tgggg tggtcgggat | accgagaaaa | tgtttggagg | 300 |
| caaaagcaag | aatactggca ggtag | aaacg aataggcccc | gttcatagaa | cgtctcgcac | 360 |
| tgttgatctt | tggaggagtc ccttt | | | | 385 |
| <210> <211> <212> <213> | 6261 230 DNA Glycine max | | | | |
| <400> | 6261 | | | | |
| agctatttta | tgatgtgtcc agcact | tagaa ctaggtccct | aacataaagg | gcatgtgtgt | 60 |
| gttgagttta | tgaattcttc ctaaaq | gagge ttgeetggat | tgaatctcct | ttctatagga | 120 |
| agatagcttc | attatgagtt ttggco | ccata atctgatagt | tcccaataag | agaaatttgg | 180 |
| actagcttca | ggatcatcca acaaaa | atatc tttagtctga | aaggtcacgt | | 230 |
| <210> | 6262 | | | | |

| <211> <212> <213> | 418 DNA Glycine max | |
|---|--|--|
| <223> <400> | unsure at all n locations 6262 | |
| ggtctatato | gacgactgct atgagcagga gacttggcgc tatgactcag aggacctgaa | 60 |
| gttggtgctg | gatgtgttac cgttctatta ttactttaac gattcggtgc acttttcgat | 120 |
| aaagttcggg | actaccctag atctcgaaca actcccaact atacaccacc catgattgta | 180 |
| ccggtgcctg | ccgagaacat tactaatcct atccctgttt gtactaagaa tcatccaact | 240 |
| caacccaatc | aaactcaaac ctataactcc aattctaggg aggaggcaca aaaaactccc | 300 |
| gtagaccaca | cgataattgg ttntgggccc catccaggat ataccttnga agggcatgca | 360 |
| ttntttagtg | tncctatgtt gaacgctcct aaagcctctc aatagcaccc gttatcac | 418 |
| <210> <211> <212> <213> | 6263 479 DNA Glycine max | |
| <223> | | |
| <400> | unsure at all n locations 6263 | |
| <400> | | 60 |
| <400> | 6263 | 60 |
| <400> tctcgctgat taaactcaat | acggcactat agaactcagc tgacaactat gctcaagtag attgcgaagc | |
| <400> tctcgctgat taaactcaat atagggcaca | acggcactat agaactcagc tgacaactat gctcaagtag attgcgaagc gnngatanaa ccactccaag tccagaaact tgtgtattct cacattctgc | 120 |
| <400> tctcgctgat taaactcaat atagggcaca accttcaagc | acggcactat agaactcagc tgacaactat gctcaagtag attgcgaagc gnngatanaa ccactccaag tccagaaact tgtgtattct cacattctgc tcatcatgca ggggcagctg ggataccaag tttaccaagg catctagtct | 120 180 |
| <400> tctcgctgat taaactcaat atagggcaca accttcaagc tctaatgacc | acggcactat agaactcagc tgacaactat gctcaagtag attgcgaagc gnngatanaa ccactccaag tccagaaact tgtgtattct cacattctgc tcatcatgca ggggcagctg ggataccaag tttaccaagg catctagtct ctcctaagtt cagatgatgc tgatgattt atggctactt catgccgtcc | 120 180 240 |
| <400> tctcgctgat taaactcaat atagggcaca accttcaagc tctaatgacc gccccaacca | acggcactat agaactcagc tgacaactat gctcaagtag attgcgaagc gnngatanaa ccactccaag tccagaaact tgtgtattct cacattctgc tcatcatgca ggggcagctg ggataccaag tttaccaagg catctagtct ctcctaagtt cagatgatgc tgatgattt atggctactt catgccgtcc acaggaacaa taactgccct gaaccgctct gccaaactcc ctccttctcc | 120 180 240 300 |
| <400> tctcgctgat taaactcaat atagggcaca accttcaagc tctaatgacc gccccaacca aacccccttg | acggcactat agaactcagc tgacaactat gctcaagtag attgcgaagc gnngatanaa ccactccaag tccagaaact tgtgtattct cacattctgc tcatcatgca ggggcagctg ggataccaag tttaccaagg catctagtct ctcctaagtt cagatgatgc tgatgattt atggctactt catgccgtcc acaggaacaa taactgccct gaaccgctct gccaaactcc ctccttctcc tcgacctggc ccccggcact tcaagacccc cccctccgcc caccccaaac | 120 180 240 300 360 |
| <400> tctcgctgat taaactcaat atagggcaca accttcaagc tctaatgacc gccccaacca aacccccttg tccgcgttgt <210> <211> <212> <213> | acggcactat agaactcage tgacaactat geteaagtag attgegaage gnngatanaa ecactecaag tecagaaact tgtgtattet cacattetge teateatgea ggggcagetg ggataceaag tttaceaagg catetagtet etectaagtt cagatgatge tgatgattt atggetaett catgeegtee acaggaacaa taactgeeet gaacegetet gecaaactee etecgacetgge ececggeact teaagaceee ececteegee caceceaaac etecacagege teetegeta cattgegett gecetetege accecteace | 120 180 240 300 360 420 |

| tacttctcac | cagcatttct | ttggttaaca | ccaattatat | tttcattcta | gcattttaat | 60 |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| agatttgtat | ttagaattgt | gtatttatat | tgattggaac | agatatagtg | ttccttttgt | 120 |
| ttttcttcgt | tgagtttgtg | ttaattaact | ccacgttgtt | attaatttt | cttgattgta | 180 |
| ttctcaaaat | ttcttagatt | tggttctatc | taattatcct | ggacccattg | attgtagaaa | 240 |
| gatattcata | gggggtttag | cgagagaaac | gccgattgat | gagtggtttc | tatttgtatt | 300 |
| gcattnggtt | ttctttccgg | gtttaccaat | gagatttcgt | gaattaacta | attttttaaa | 360 |
| ataattttgt | ggagcgcaat | tcat | | | | 384 |
| <210> <211> <212> <213> <400> | 6265 270 DNA Glycine max | × | | | | |
| gagagggcca | ctaagcacta | ggttgtcaaa | gaaactatct | cacacaagct | tctcaacgaa | 60 |
| gacctctaat | agagaatctg | acagaagcta | cctagtctat | acatagaagc | atgtgtaaca | 120 |
| cttgctggaa | ctttgatgac | atgagagtct | tgagagacac | aactcatagc | tcaacttctc | 180 |
| tcccttttc | ttccttcaat | ttcgtgctcc | cccctctctc | tatctctccc | tctttctttt | 240 |
| cctccattga | aacatcctct | ccaagcttct | | | | 270 |
| <210> <211> <212> <213> | 6266 340 DNA Glycine max | ς | · | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| tcatgaattg | agaggattag | cattacgcct | tgcanatcat | ggagagttga | ctcggctaag | 60 |
| tgtaggcagc | ctttacttaa | tattgcatat | gttaatttag | ctattactcg | ttattcctct | 120 |
| gctttttggc | catgatcatc | cagtactgtt | ggtttaaagg | tagcacatag | atggaataaa | 180 |
| aaggactaat | ttttgtttct | ttgatatttt | aaatttccaa | ttctcttatt | gaacttaaca | 240 |
| ccttcaattt | atgttaaaat | aataaaatga | ctgtttgaga | tggcatacat | ctgtctttct | 300 |
| ttaaastssa | ttatattatt | | | | | |

| <210> <211> <212> <213> | 6267 445 DNA Glycine ma: | × | | | | |
|----------------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| <223> <400> | unsure at a | all n locat | ions | | | |
| cttagctctg | caattntnta | gccatgacca | cattgtcaac | aaattatata | aatgaataca | 60 |
| tatgatctgt | atgtctatca | aattgatata | atgtatcaaa | ttttaaaatt | caaaattcaa | 120 |
| atttaaattg | agatagacta | attttaaaca | atagggggaa | ataaaaaact | taaaaataaa | 180 |
| ttagtgtgac | atacttgata | cgggagaagt | tatgtagctt | atcatgaaag | agagtgagta | 240 |
| gttcctaata | ttctcttgtt | caagagtgaa | tacttttata | agggtgaatt | tatgcatcca | 300 |
| aatataacat | gttggtcccg | agtaaaattt | taaagtgaag | cttcatcatc | tttgcattcc | 360 |
| aacattgaaa | cggttgggct | ggcccatgca | ttccagcttt | aatagaagta | catatgtgat | 420 |
| attataaagt | tggaaagcct | acact | | | | 445 |
| <210> <211> <212> <213> <400> | 6268 454 DNA Glycine max | τ | | | •. | |
| catctaacgc | gctttacccc | cccagacccc | ggtggacaca | aatttgttta | ccaaccacac | 60 |
| tctcagagct | ctcaacagct | cccacgaact | tctcaggaag | cgccctatta | atagaggaga | 120 |
| gagggacctg | agctctatct | cgacaggaac | acttctcacg | gaaccttctg | caagaagtct | 180 |
| tctaataaga | gatctcaacg | acaccaccta | tactataaat | tcgcggcatg | ggttacacta | 240 |
| gcttgaacta | tgatgaacga | tagtcttgtg | agacaccact | cagagtgcaa | catcatctcc | 300 |
| ttattgctcc | taccaagacg | agctccccc | tctctctgtc | tctccctctg | tacttgactg | 360 |
| cattgaaaca | cccgcctcaa | gcttctaaat | caggctcatc | cggttgtaaa | acaccatctt | 420 |
| cctggctgat | cccaaaagaa | cgccctccat | aacg | | | 454 |
| <210> <211> <212> <213> | 6269 235 DNA Glycine max | | | | | |

| | <400> | 6269 | | | | | |
|---|----------------------------------|-----------------------------------|--------------|--------------|--------------|--------------|-----|
| | tgctataaga | gtaatgtccc | actggtaaaa | ctaactttco | aaatgtttgo | cttcgcaaga | 6,0 |
| | atggccccga | ggaagcttgo | ctcaaagagg | r tccaggaagg | acaaggcggc | c cgaaggaact | 120 |
| | agttccgccc | cggagtacga | cagtcaccgc | : tttaagagca | ı ttgtgcacca | gcagggcttc | 180 |
| | gaagccatca | agggatgggc | agttctcctg | gagcgacgcg | r tccagctcac | ggacg . | 235 |
| | <210> <211> <212> <213> | 6270 472 DNA Glycine ma | x | | | | |
| | <223> <400> | unsure at 6270 | all n locat | ions | | | |
| | cgtgccatca | ccatttggcc | tanacccatt | ccgggctcat | acctatccct | caacataact | 60 |
| | cgggccacca | tcaaggaggc | actagataaa | cgtggttgca | ctggaggagc | ttcaacataa | 120 |
| | gcattgttca | caatttctag | cgcttgaaaa | gatgtttcca | acaactcttc | tacagcttcc | 180 |
| | acatagggtg | tagaggatgg | acaactcact | agtatatctt | cttcccctga | cactataacc | 240 |
| | agttgtcctt | ccaccacaaa | cttcaatttc | ttctgcaaca | ttgacgggac | caccccaaca | 300 |
| | gaatggatcc | aaggccgacc | tagtaggaaa | ctataggcga | ggtttatgtc | cattacttgg | 360 |
| | aaggttattt | ggcagcgtgt | ggcccaattt | gaatagggag | atcgatctct | cctctcatgt | 420 |
| | cacaccggct | accatcaaaa | gcccttacca | ccatggagct | tggcctcatg | tg | 472 |
| | <210> <211> <212> <213> | 6271 288 DNA Glycine max | × | | | · | |
| | <223> <400> | unsure at a | all n locati | ions | | | |
| ċ | actgagatgt | ctgcttggag | tactngcatt | atatgacata | agctgnaact | taggggagag | 60 |
| ć | atggttaggt | atctcaatgt | gtcactacac | tgttctattt | tataggactg | acaggggttg | 120 |
| ç | gatagttgct | ctacccacgc | ctacattgct | accatgcagt | tatgtggctg | gtgtctttat | 180 |
| t | gtcatgcta | ttatgagaga | cttgtgtgta | aggcttataa | cagccatttt | cggatgattg | 240 |
| ć | atactatga | gcactctctt | cacatattaa | gcgagataca | cgtgcata | | 288 |

| | <210> <211> <212> <213> | 6272 269 DNA Glycine ma | их | | | | |
|---|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| | <223> <400> | unsure at 6272 | all n locat | cions | | | |
| | caacttattn | ttaattcttt | tanaagattt | ttcaagttgg | ggttagttt | agttttctcc | 60 |
| | aatttttaat | tntaatataa | actcattttg | aaagtttcat | atcctatgaa | attagtttaa | 120 |
| | gattgttttt | gtgtggtggt | gacaccaatg | ttgtaggtga | ttacaacatg | gtgatggtgg | 180 |
| | tgccgatgtc | gactgtggca | gtggtggtgt | caatattgat | gacaattgtg | gttttgggga | 240 |
| | ggatggtagt | ccctgcatac | gtggtgatt | | | | 269 |
| | <210> <211> <212> <213> | 6273 325 DNA Glycine ma: | × | · | · | | |
| | <400> | 6273 | | | | | |
| | ctaaagaaag | catggatcca | atagcatcag | ggatttgact | tagattgcag | aaacttagat | 60 |
| | caaggtcatg | caaacaagag | aagctaggca | aggaaggcaa | caaacaacca | cctgaatttt | 120 |
| | tagaccctct | agagtaggag | aaatggaaag | gtatgaatct | cttgatgatg | gaggaggatg | 180 |
| | ttgactggga | ttgcatggca | gtttccctga | tattaggaat | catggaatac | tccttcatta | 240 |
| | ttgggttctc | taacagttga | ttactaaata | tttttggaca | accagagata | tttagatatt | 300 |
| | ccagagaact | tagacccaaa | atatt | | | | 325 |
| | <210> <211> <212> <213> | 6274 420 DNA Glycine max | c | | | | |
| | <223> <400> | unsure at a | all n locati | ions | | | |
| 1 | tgtganaacg | tacactccat | attctaataa | aaatgtctaa | ttttattgtt | tgaaaatgta | 60 |
| t | tgatagcac | ttttcaaatt | caatactaaa | accagaacat | acttggtctt | aaatgcatat | 120 |
| t | gtattgttt | ggtaagacgt | tagctaagag | tgaagagttg | aaagaatgga | gaaagtgacg | 180 |

| gaaggagga | a cgcggngtto | g accccaaata | a ttggttcaaq | g tacaatttct | ctaacgcaaa | 240 |
|-------------------------------|-----------------------------------|------------------|--------------|--------------|--------------|-----|
| aatcaacat | t ctttgtttca | a aaaaataaat | aaaaaaatca | a acagtettta | acacactaca | 300 |
| atttgcttt | g ttaaaggctt | atttatttat | aaatatttt | aagattctca | ı ttntatgtca | 360 |
| tagacaatc | c acataaccaa | attaactact | attgtttctt | ccggttgggg | ı agagctggaa | 420 |
| <210> <211> <212> <213> | 6275 411 DNA Glycine ma | x all n locat | ione | | | |
| <400> | 6275 | all ii locat | TORS | | | |
| ataagataaq | g attggatgan | ataaaatcta | gatgaaataa | . aatctggata | agataatata | 60 |
| agataacatt | ggatgaaata | aaatctagat | gaaataatat | ctagatgaaa | taaaatctgg | 120 |
| ataagataag | , atttgataaa | ataaaattgt | ttgttctctt | caagtccaag | cccaattccg | 180 |
| gattcaagco | : caattgctta | taattctcct | gaaattaaat | taaaaacaca | aaattagtcc | 240 |
| agtaggccca | aatgataaaa | ttgcataatt | aatttgacaa | ttaaggctaa | taagtaatta | 300 |
| aaatggtgac | aaaaagggtt | aagaaatagg | agaaaatatt | gacacatcac | cgtcgctctg | 360 |
| gccaaactat | cttgaaagaa | gtgcatcaaa | gattctcgtc | tctggaatat | g | 411 |
| <210> <211> <212> <213> <223> | 6276 471 DNA Glycine max | | lons | | | |
| <400> | 6276 | | | | | |
| cgcgctntca | tatctaatat | tacaacttgg | tctaagaact | ctattaccta | tcttgtcctg | 60 |
| acaacaggtt | gggatttttg | agatagcccc | atccaagcag | tcattgcagt | ctttctcaga | 120 |
| caagtcaggg | gtgcactctg | ccataccata | tatggtctga | aaacttgaag | cagttacatt | 180 |
| atccgtggca | tacttacgac | gagagtcacc | cgatgcggct | acacctttga | ggtttctcat | 240 |
| taagttcgcc | agagettgae | tgaacttatc | cggttccgtt | acattgttta | tgttcatcaa | 300 |
| ggattggcta | ggttcaattt | ccatgatgcc | aaatatcgag | cggggtgagt | agcgcaacat | 360 |
| gcatttgcta | gtgttcaacc | acagaagtgc | ctctttctgg | tttggacaaa | actgtttaat | 420 |

| | tgtgactctg | gaatcattga | a ggcaactgco | g gcactcatgt | ggctcaacai | ī c | 473 |
|---|----------------------------------|-----------------------------------|--------------|--------------|------------|------------|-----|
| | <210> <211> <212> <213> | 6277 582 DNA Glycine ma | ax | | | | |
| | <223> <400> | unsure at 6277 | all n locat | ions | | | |
| | ctatgacgct | cacgtctago | atanagacac | acngtaccgc | aaccgattnt | actcaaagac | 60 |
| | ancacacaan | agccgacact | aacatgaaac | gcgccacana | tactacagct | ncccggccag | 120 |
| | gggagagcct | cttcaaccac | : aaagacatac | atatttatat | tcatgatgat | acccggagca | 180 |
| | cagagggcgg | acgttggaag | ccgacacaag | ccaagaatgc | gacgactagt | ggaacatgca | 240 |
| | aagctgagcc | aacaaaaggc | tccagcgatt | atccccacca | aagatagact | aagagaagtg | 300 |
| | gcgacaacaa | gaacgcggcc | caacataaca | acaacgagcg | accgtaacca | aaaagaccca | 360 |
| | cctaaccacc | aagggtgcgg | ggaagaaaac | atcggcaaac | acgatccaca | gtacaacaac | 420 |
| | ccaaaccgaa | cagggggaag | agcggaacag | aaaatcgtaa | accgatcaca | gtgcggaaca | 480 |
| | aatacccaga | cccaaacaac | tcacatcgcg | agcggaccat | aggatagagc | cgcaaaatta | 540 |
| | aataaaccta | cactaccatt | ggaactgaga | cacgggcccc | CC | | 582 |
| | <210> <211> <212> <213> | 6278 450 DNA Glycine ma: | x | | | | |
| • | <400> | 6278 | | | | | |
| (| ctcagctcgg | gatgtatact | gatgccaatg | tttacaacca | tttataccat | attcttgttg | 60 |
| (| caatatgaca | caggaagagt | aagtggctgt | tagattcctc | aactgtatta | cataaaggac | 120 |
| ć | actaattatc | ctttggagat | aacatgattc | ctctgacttg | aaggttatct | ctagtagttg | 180 |
| C | ctctattaat | agacgcactc | catacgaaga | atttcacttg | aggaagaacc | ttaagtgctt | 240 |
| ē | aacagattt | gaagaacgat | gactcttgag | atgcctcatc | tgtcatgata | gtgagcttgt | 300 |
| ç | ataggccga | attcgcagaa | taattcccta | agggtctagc | caaccaaata | cacctgtaca | 360 |
| t | gctagaggg | ttagctgtat | aaccaagttt | agaagaagga | ccatcgattc | atccactage | 120 |

| ttctattccc | c aaactaacca gtcctttctc | 450 |
|--|---|-----------|
| <210> <211> <212> <213> | 6279 584 DNA Glycine max | |
| <223> <400> | unsure at all n locations 6279 | |
| acccaggcac | tactactata tcgcatctct ctataactnt taaattaaan acctacgann | 60 |
| aacnncccnn | nnccccgtgt catgatacgc gccacttata cacagccccc ggctacgcaa | 120 |
| gaccagccat | agcggccaag aagcttttct cgaacgagaa gagtgcacca gatgagggct | 180 |
| agatgaaata | gacactggac cacacaatgt acgatgacag aggatgagac aaagcccaca | 240 |
| tgacacaatc | tctagatgaa atacaacctg gatcggagaa cgattgagca gcaaacaaag | 300 |
| gatgacctct | acaagaccaa gcccaactcc ggatgcaagc ccgagagctc agcagacgct | 360 |
| cagcacatcġ | gagacaaaca caccagcatc gtcagggagc ccgaaggaga acactgcgtc | 420 |
| attaatccga | caactcaggc taaacacgga gtgaaaagcg gacatagcag ggtcagaagt | 480 |
| cagaccaaca | tatgacacat caccgtcgct gcgcccacct atcgatggcg acgtgcgaag | 540 |
| aagatacgcg | cctctggact atgcgcccaa cttgccacct cccg | 584 |
| <210> <211> <212> <213> <223> <400> | 6280 497 DNA Glycine max unsure at all n locations 6280 | |
| | tcgcggcctt agactccgac gctcgactat tatgtggctg aatcggactg | 60 |
| | agttataatc tatctagcac tgacgacagc gttgggtgtt tgatatagac | 60 120 |
| | agttattcgc gcttatctca cacccgtcaa gggtgcgctc tgccatacca | 180 |
| | gaacactccg tgcacactca ttatcctggg catactcact gccatagata | 240 |
| | cgacaccatt gatgctgatc attgagacct gcaaagcttc gcagaactta | 300 |
| | taacatatgt catgtccgtc aatgatcggc tatgtgtaaa ttccctgatc | 360 |
| | | |
| - | To the second gardened contagedat gadgigedie | 420 |

| tttcttgcgt | gacagagtgt | gaactttgac | gatgaatcat | tgtggatccg | agactcatag | 480 |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| ggttgcagac | actctcg | | | | | 497 |
| <210> <211> <212> <213> | 6281 448 DNA Glycine max | x | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| acctgtctga | gcaatcttat | gttctggttc | tcaccttcat | atcctctnga | ccttctccca | 60 |
| ttacctgcaa | gcaaacattg | tgttctggag | taggcttgtc | ttccacagac | aagtcgaaat | 120 |
| caatttttgg | gtcttcaaaa | cctaactcca | gctttctctt | ccccatgtca | actatgcagc | 180 |
| ttgcggtcaa | catgaacggc | cttcccaaga | ttacaaggat | gtcagtatct | tcagagatat | 240 |
| ccataaccac | aaagtctgct | gggaagataa | aatgttttac | cctgaccaac | acttcaatca | 300 |
| ctccacatga | cctggtgatg | gagcggtcag | ctaattgcaa | agtcattcga | gtgggcataa | 360 |
| tctncaacta | ctccagcctt | ctgcacatgg | agagtggcat | caaattaatg | ttggctccca | 420 |
| gatcaatcat | agcctcttcc | acatttac | | | | 448 |
| <210> <211> <212> <213> | 6282 326 DNA Glycine max | . | | | | |
| <223> <400> | unsure at a 6282 | ıll n locati | ons. | · · | | |
| tcaccattag | tgacgggaac | cttactcttt | cttatggagg | ccactataac | ctgacacatg | 60 |
| cgagtgaggg | ggctaccacc | gggcttctga | atccgataca | gactcgtacc | ggataagaag | 120 |
| ctcaccacag | caattgccat | ggccactgct | ggaaagacaa | atccccaccc | ccaacttaca | 180 |
| gtagtaagga | cccacaccac | caaagaagca | gcaacgcgac | caccactatt | tattgacaag | 240 |
| cagaaccact | ngaagaaaga | gctcttgtgc | tcnctctcag | cttcatcagc | atcacaaatt | 300 |
| gagtgcacca | aagaagagac | acaagc | | | · | 326 |
| <210> <211> <212> | 6283 342 DNA | | | | | |

| <213> | Glycine max | |
|-------------------------|--|-----|
| <400> | 6283 | |
| tttccattg | c actcaatgat gagatgtgtg cattatcacg tgaaaaagag gctaagcttt | 60 |
| gaattgcag | a aagtagccgt tgggctaagc tcatcagttg ggctaagcgc ataaccacca | 120 |
| ctaagtgta | g cattagcacg cttagcacac aggagaatct agcagagcat cagcatcaga | 180 |
| ggcgtgcgc | t aagcgtgaga tcagtgagct aatcacagaa ggtgccttca gtctagctaa | 240 |
| gctagagact | t ggcgctaaac ccaatttcac ttactcgcac taaacgcaag ggtggcgcta | 300 |
| agtgcaacgo | g cgcgatatca aagcctatct aagcctattt tg | 342 |
| <210> <211> <212> <213> | 6284 465 DNA Glycine max | |
| <223> <400> | unsure at all n locations 6284 | |
| actaagcttt | acctttagtt taacccttag aacttcccgg ccaaattgtt atatataaag | 60 |
| caatgttgat | gttcaaagga cactttacat gcctttntaa tcaactgacc tacgcttaqc | 120 |
| aagttctggt | caatgttagg tacataaaga acatctgata ttaatttgat acctyuudac | 180 |
| | caacagttcc ttttcctttt ataggaatat agccaccatt cccaattctg | 240 |
| | cattagttgg cttcaaatcc ttgaataaag tcttatcata tgtcatgtgg | 300 |
| | cactatcaat caaccaactt tcacttgatt cactactcaa ggttgataat | 360 |
| | atccttacct ttgatatgga tgattgcact attttcgctg cttgctggct | 420 |
| ggatetteta | gaanaaatgc tttntgcttt catcaacttc atgat | 465 |
| <210> <211> <212> <213> | 6285 424 DNA Glycine max | |
| | | |
| <223> <400> | unsure at all n locations 6285 | |
| cttggggttg | ttagttcatg acatggtttt ggagcctatt tgatcagtgt gtcgacagtt | 60 |
| tgatccacat | cacccaccc ttattttct aaggcttaaa tatattttt tatccctgca | 120 |

| agataacac | tttttcattt | tegteettge | aaatatattt | tttttcgtct | tagtctttgc | 180 |
|-------------|-------------|-------------|------------|------------|------------|-----|
| aaaatgtgti | tgtttgtttt | tcatccctaa | agtactttag | ataccgcttt | gaacagtaaa | 240 |
| aaagtgctt | gaacacacac | aaaaaatgct | atctaaagca | ctttaaggac | ggaaaacaaa | 300 |
| acaatcatat | tttgtaagga | ctaaaacgat | tttttttta | tgtgaacgan | aatgaaaaaa | 360 |
| gcgctaaact | gcaaggacca | aaaatgtagt | taagccttct | tctaatacaa | aagttggatt | 420 |
| tgag | | | | | | 424 |
| -210- | 6206 | | | | | |
| <210> | 6286 | | | | | |
| <211> | 101 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine max | ĸ | | • | | |
| | | | | | | |
| <400> | 6286 | | | | | |
| Cagettgett | teteggaagg | gggggtatat | | | | |
| cagecegee | tctccgaacc | ggcactatat | gtttegeeet | ccatcaattc | aactcgacat | 60 |
| gacaggaacc | ttcccgtggg | cgcattgagt | gcaacattga | + | | 101 |
| | 3 333 | 3 | gamaaaaaga | C | | 101 |
| | | | | | | |
| <210> | 6287 | | | | | |
| <211> | 367 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine max | C | | | | |
| | | | | | | |
| <400> | 6287 | | | | | |
| tgtctgaacg | tttatgccag | acaaagacca | acatgttatc | cattattggc | tagtaccaag | 60 |
| | | | | | | |
| aagaatttaa | tctatccatg | gcccatgagc | acaaagaggc | ggatgagtat | gccctagtgt | 120 |
| ctgcggaaaa | tgaggctata | agaagggtga | tcgactcgtt | acatcaagag | gctacaatgt | 180 |
| | | 333.3 | | acaccaagag | geededdege | 100 |
| ggatggaccg | agaagctctt | actttgaacg | ggagtcaaga | actatcccga | ttgctggcca | 240 |
| | | | | | | |
| gggccaaagc | aatggtgaac | acctacttcg | ccctttagga | gatgcactga | cttctcatgt | 300 |
| atastsassas | | L. L | | | | |
| acagecagea | tatgatagac | LLaatggccc | atataattat | gaaccggtag | gaagtgtgta | 360 |
| ttgtcac | | | | | | 367 |
| - | | | | | | 507 |
| • | | • | | | | |
| <210> | 6288 | | | | | |
| <211> | 423 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine max | | | | | |
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| <400> | 6288 | | | | | |

| agcttagaad | atgcaatgtg | agcagagact | aattcgagct | taagctgggt | ccttttcttt | 60 |
|------------|--------------|--------------|------------|------------|--------------|-----|
| ctaggttgca | a tctttctcct | cttccctgct | tgactcttta | cagtgcttgt | gtgtgggtga | 120 |
| atcactctgt | atagctccta | tggtatatgt | atatgtattg | tttctgtagt | tggaaatcat | 180 |
| aacttacaga | ı aagaaaagaa | gaatactagt | agatcaacag | tgtcatatac | tcatattcac | 240 |
| tggctaggag | , aaaaactgaa | aaagctttct | ccatatgttg | cttttggcag | acaatccgat | 300 |
| ccttgcccag | aaccgctgca | gtgttataac | caatttttt | taccttagaa | taatacaata | 360 |
| aatacaatat | gaacattaca | gtcagtgctt | ctgtgagtgt | ttttacccgt | tttactgatc | 420 |
| tcc | | | · | | | 423 |
| <210> | 6200 | | | | | |
| | 6289 | | | | | |
| <211> | 613 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine max | K | | | | |
| | | | | | | |
| <223> | unsure at a | all n locat: | ions | | | |
| <400> | 6289 | | | | | |
| | | | | | | |
| tctattgact | accaaaatta | cgagtttaat | aatcttcagg | ttcaaatacg | tggtactata | 60 |
| | | | | | ugg cu coucu | 00 |
| attccgctag | ttatcaaact | cattaaataa | tatagcaata | taatattgaa | ctaactaggg | 120 |
| | | | | | ccaaccaggg | 120 |
| tggaaaattt | tcttactata | aaattgcgtt | aaactttaac | tctaaactaa | caagtatata | 180 |
| | | | | | | 200 |
| aataaactaa | cgagtatata | tattatggtg | tcaatatttt | taattttaag | taaaatttaa | 240 |
| | | | | | | |
| aaggtataaa | taaaaataaa | aatgtttaaa | tttataaata | gaacatgttt | cacactatat | 300 |
| | | | | | | |
| aaaaaataaa | acaattaatt | tgagcatttt | aaaaaaatta | cttttcaaca | gtaaagccac | 360 |
| | ., | | | | | |
| atgttgaaga | aagagatcat | cacttttaat | accatacatt | tattttatta | tacaaaggac | 420 |
| | | | | | | |
| aatagaaata | caacacgaag | aaaaatcatt | aaagcaaaca | attgctatat | attgtatggt | 480 |
| | | | | | | |
| tatgccttgt | gggtgtggta | tcgctcaagt | atttaagagt | gattgattat | atgatagata | 540 |
| | | | | | | |
| acatcattta | gaaaaaatac | tttttnttt | ctaagccaat | tagaaaaata | cttgacaacc | 600 |
| | | | | | | |
| tacaactaag | tgg | | | | | 613 |
| | | | | | | |
| .010 | | | | | | |
| <210> | 6290 | | | | | |
| <211> | 423 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine max | | | | | |
| | | | | | | |
| <400> | 6290 | | | | | |

<212> <213>

Glycine max

| agcttctcaa | a ggaagccacc | tagtctataa | atagaagcat | gcgtaacact | tgttgtaact | 60 |
|-------------------------------------|--|------------|------------|------------------------|------------|------|
| ttgatgaatg | g ggagtcttgt | gagacaaaac | tcaaagttca | acttttctcc | ctttttcttc | 120 |
| cttcagtttc | gtgcttgccc | ctctctctt | ctctccctct | ttcttttcct | ccattgaagc | 180 |
| atcctctcca | a agcttcttat | ccaaggttca | tcttggtggt | gaagctcctt | cttccatggc | 240 |
| ttattcccta | gtggatggcg | cctcctctca | cctcttctcc | tttgtcttcc | gctgcatctc | 300 |
| catggtggaa | aatcaccatt | aaaggacctc | attgaagctc | aaagatccag | cctccataaa | 360 |
| agccccacaa | gcaaactttc | atcaactacg | tccactaaag | aagggtttgt | gaggaatggc | 420 |
| tta | | | | | | 423 |
| <210> <211> <212> <213> <223> <400> | 6291 624 DNA Glycine max unsure at a | | ions | | | |
| ttctccacta | agttgcctga | tgcctgaaat | gtcttttctg | atggca _i 'd | tcctagatgc | 60 |
| agggaagaat | ttctccatga | acaccctctt | aaggtcattc | cagctgaaaa | gacctagg | 120 |
| agcaaggtag | tatagccaat | cttttgtcac | tccctctaga | gaatgaggaa | aatcctttag | 180 |
| aaagatatga | tcttcctgga | cattaggggg | cttcatggtg | gaacaaaaaa | tatgga c | 240 |
| cttaagatgc | ttataaggat | cttcacctgc | aagaccacga | aacttgggca | gcaaatglat | 300 |
| tagtccagtc | ttgagaacat | atggaacacc | ctcatcagga | tattgaatgc | acaagctttc | 360 |
| ataagtgaaa | tcaagtgcat | ccatctctct | aagagtcctt | tcacgaggtg | gaddttganc | 4.20 |
| catgttctca | gtatgaaaat | tagcagcgga | atgttcaaaa | • | 3 | 480 |
| ctcaacagaa | tgctcaaaat | gcacataatc | ^cagga | *cactatgcc | taactaatct | 540 |
| atgaaagggt | ctatctattn | tatgatcaaa | gggu gtaaa | tcacctagat | tgcccctagt | 600 |
| catgcactat | atgcagcaaa | tagt | | | | 624 |
| <210> <211> <212> | 6292 402 DNA | | | | | |

| <400> | 6292 | | | |
|----------------------------------|--|---------------------|--------------|-----|
| agcttgaatc | ggacctgagt gtgaaaagtt atç | jaccattt gaatttctcg | aaagctttcg | 60 |
| ttgttcaatg | tegageatet egacatatta tge | getegaa tegaacatee | gagtgaaaag | 120 |
| atatgaccat | ttgagtttct cgagagcttc cgt | ggttcaa ttccgagcat | ctcgacatat | 180 |
| tatgtgcccg | aatctgacct tcgtgtgaaa agt | tatgacc atttgaattt | ctcgagagct | 240 |
| tccgatgttt | aatttcgagc gtctcaatat att | gaaagcc tgaatcggac | ctcagtgtga | 300 |
| aaagttatga | ccatttgtat ttctcgaaag cct | tccttgg ttaaattccg | agcatctcga | 360 |
| caatatatgt | gcccgaatct gcctttgggt gaa | aagtatg ac | | 402 |
| <210> <211> <212> <213> | 6293 563 DNA Glycine max unsure at all n locations | | | |
| <400> | 6293 | | | |
| tcttatccaa | ggcaattctt ggtggtgaag ctc | cttcttc cttggcttat | tccctagtgg | 60 |
| atggtgcctc | ccctatcctc ttctcctttg cct | tccgctg catctccatg | gtgaaaaatc | 120 |
| accattgaag | gacctcattg aagctcaaag atc | cagcctc catagaagct | ccacaagcaa | 180 |
| gcttccatca | cttttcacac agaggtcaga ttc | gggcaca taatatgtcg | agatgctcgg | 240 |
| aattgaacca | cggaagctct cgagtaattc aaa | tggtcat aacttttcac | acagatgtcc | 300 |
| gattcgggcg | cataatatgt cgagtagctc gaa | attgaac aacggaagct | gtcgagaaat | 360 |
| tcaaatgggc | atacttttc acacctgcct cac | attengg cacataatat | gttgagatgc | 420 |
| tcggaagtga | accacgaaag ctctcgagaa act | caaatgg tcataacttt | tcacacggat | 480 |
| gtccgattca | ggcgtatcac atatacagac gct | cgaaatt gaacaacgaa | agctctcgag ! | 540 |
| aaatacaaat | ggtcataact ttt | | į | 563 |
| <210> <211> <212> <213> | 6294 360 DNA Glycine max unsure at all n locations | o | | |
| <400> | 6294 | | | |

cttcaagcca aggccagatt ctcgtgcatg cagaggcttc tgaagaagaa aaatgccaaa

| ctccccttaa | aaaatttgat | ttcaagctta | aatacgtggg | ttggtccgtg | ctcacgtgct | 120 |
|----------------------------------|-----------------------------------|--------------------|------------|------------|------------|-----|
| tagcgcaaat | ataaatcgct | tagcgcgcat | aagtggattt | cggcttaacg | tgcttctctc | 180 |
| gcttagcgga | tgagctgaag | tggtgcgctt | gatgacctgg | agcggtgcac | tcagcgaacc | 240 |
| tgacagctca | tcttcttctg | gatgattcct | cgcgcttagc | cactgagtgt | cgcacatagc | 300 |
| gaatgatcgc | taagctagaa | gattggctta | tcgagaaagt | aaaaaatagc | atttttgccc | 360 |
| aatttgccta | attaaccccg | aaattgaaaa | gaaattgatt | atttaacccc | accaaaacca | 420 |
| aaagttttaa | attatctatt | acctatattt | aatagaaaag | tcttataata | ttacaaaaca | 480 |
| ac | | | | | | 482 |
| <210> <211> <212> <213> | 6297 596 DNA Glycine max | ς | | | | |
| <400> | 6297 | | | | | |
| tattattatt | tatacatact | aacaataagg | tacattaact | tggtaaatta | aattatcggc | 60 |
| gtaaatgtac | atcaatataa | atataatata | ataaaatatt | aacaatgttg | ttaatggcgg | 120 |
| aaagccaaaa | attcactata | aaaatatggc | ggatgacgta | acagaaaatg | acggatgtca | 180 |
| tggcgaacaa | aaaaaaata | catatttata | aagtcactga | aattgaaaaa | aacaatggat | 240 |
| tgcattcaaa | taaactaaaa | atgtttcatg | agttcataca | ataatcaatt | atcaatacca | 300 |
| | ttaaagagtt | | | | | 360 |
| atcaaaagga | aaaaaaagct | gcatacaaag | aaaggggtgt | caaacagcaa | aaacaaaatt | 420 |
| gaaaaaaaaa | aataaaagct | aaagggcacc | acttcacccg | cgatgctgtt | tgccttcatg | 480 |
| aaggtagtgg | tcaccattcc | äggctcgtg c | tcgcgccgcc | gttccaagct | tgtgctcgcg | 540 |
| tcgtcgttcc | tgtcggtggt | tgcatcgccg | ttcgtgccga | cattggctgc | ggtcta | 596 |
| <210> <211> <212> <213> | 6298 641 DNA Glycine max | | | | · | |

agctttgttt ttattttata tattatattt atataatctt atgtgttttt atcatattat

<213>

Glycine max

| tcaaaactta | ttttatactt | : taaatatata | atatgaattt | ttatctttaa | tttatatttt | 120 |
|-------------------------|----------------------------------|--------------|------------|------------|------------|-----|
| ttatataaat | tataatttca | ı taaaatgaca | atattgtatt | atcttttaaa | atatttagat | 180 |
| atgtgattta | ı atggcggtat | tgtttttacc | tatattaaga | tattatcatt | atttattata | 240 |
| ataatattt | tatttatatt | taaatttatt | taatcaagta | cataatttta | aaaaaaaat | 300 |
| aaattatata | ctaaagataa | gtaattaaat | aaaataataa | tattttctat | ttttaaaaac | 360 |
| atttatatat | gtgatttatt | gacattattt | ttttatctat | attacaataa | ataacaccaa | 420 |
| tatcttaata | tagacaaaaa | aatgttgtca | ctaaatcaca | agtattattt | taaaagataa | 480 |
| atattatata | ttaaataaaa | aaacttatat | aaatatacct | attctaattt | atatgaaaat | 540 |
| aagaatttaa | tatttatata | tttatattt | taaacatatt | atataagatt | tttaaaattt | 600 |
| tattaattta | aaaaagaaaa | aatttggatt | ttaaactatt | t | | 641 |
| <210> <211> <212> <213> | 6299 544 DNA Glycine ma | x | | | | |
| <400> | 6299 | | | | | |
| ttatgtaacc | gagtaaatta | ggatggctat | acatgtgttg | tgtatgcaat | gaccatttgt | 60 |
| cctgatatca | atacatttcc | aagtacaaaa | ttgattgatg | tataaagaaa | gaactaacac | 120 |
| atatactata | atttccatac | attcatgcta | cctcgagcca | tgttttttt | tctataacca | 180 |
| cttgaaataa | attgtcactt | ttctttttca | atatcaaagt | cttcaattag | gaagttttcc | 240 |
| aaataaatca | taagttatgt | aaaagtgtca | tattaatgtc | ctgcattgac | ccaaacttat | 300 |
| tacaaagtta | ttttcacatt | aattttttac | acactcaaat | aatgcgcaat | caacacaaaa | 360 |
| tcgctatcga | cccatacgaa | ttgcatatta | taatgacttt | acggattcgt | aatatgtatt | 420 |
| agattcagca | aaggacaatt | atgtaattgt | ccaaaatggc | ttgggtgtcc | aagtatattg | 480 |
| gtgggtgcag | taagcaaaat | tggttttgtg | atgaatgctt | cattttaaaa | ctgcaaactc | 540 |
| tgta | | | | | | 544 |
| | | | | | | 244 |



| <400> | 6300 |
|-------|------|

| agcttttcaa | cacaaaagtt | agtcgtaaat | gacgactaac | aggatcccaa | ccatttctta | 60 |
|------------|------------|------------|------------|------------|------------|-----|
| cacactcaga | acgacatata | gaggggtggt | tagccaacgt | aactccgagt | atgatgcaac | 120 |
| ctccttaacg | tcaaacgtgt | atatatagac | ccagaggaaa | tacctccagg | taagttttac | 180 |
| tcttccagat | atagacacat | aattgggaaa | tatttattac | ttattagtgt | actttaattt | 240 |
| tctttttgca | tcagtaaact | aatgaaatga | ttggggaatg | ggagataata | tcaaatgtct | 300 |
| aatgtctact | agccacacat | ggagtataag | aataataaaa | agtaggttca | tgttgtaaaa | 360 |
| taaaaaaaaa | aagtatcatt | tcttttttac | aagtgtgggt | tgtagtcact | aatcagtcca | 420 |
| cgttcataca | aaactaccac | agctctatca | ttgaccaatt | caaatctaca | cttgctttct | 480 |
| attcttcttt | ttctaggttg | gactggctac | aacatgtcaa | t | | 521 |

| <210> | 6301 |
|-------|------|
| <211> | 599 |
| <212> | DNA |

<213> Glycine max

<223> unsure at all n locations <400> 6301

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<210> 6302 <211> 344 <212> DNA

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|-------------------------|---|-----|
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| agcttataag | aaattcaaat ggtcataact tttaactcgg atgtccgact ctggcgcata | 60 |
| atatatcgag | acgctcgaaa ttgagcaacg gaagcagttg agaaattcag atggtcataa 1 | 120 |
| cttttcacac | ggacgtcaaa ttcaggcgca taatatctag agacgctaaa aattgaacaa 1 | 180 |
| cggatgcctt | cgaggaatac aaatggtgat agcttttaac tccgatgtta aagtcatgcg 2 | 240 |
| cataatatat | tgagacgctc gaaattgaac aacggaggct ctccataaat tcaaatggtc 3 | 300 |
| atgacttttc | actcggaggt cagaatcgag gacataattt atgg 3 | 344 |
| <212> <213> | 6303 359 DNA Glycine max | |
| | | |
| | | 60 |
| | | 20 |
| atattatgtg | ccggaatcgg acatccgagt taaaagttat gaccgtttga atttcttatt 1 | 80 |
| agetteegtt | gttcaatgtc gaccatctcg atgtattatg cgcctgaatc tgacatccga 24 | 40 |
| gttaaaaggg a | atgaccattt gaatttcacg agcgcttcca ttgtgcaatt tatagcgtct 30 | 00 |
| ctatatatta 1 | tgcgcgtgag tctgacattc gagtttaaag tgatgaccat ctgaatttg 35 | 59 |
| <211> 5 <212> 1 <213> 0 | 6304 567 DNA Glycine max | |
| | | |
| | | 50 |
| | aagactaagc ttagtttaag ttagtctaaa cctaggaggg ttgtctaaat 12 | 0 |
| | caacaagag ggatatgagg atgaagettg gattgattea ttetaaetag 18 | 0 |
| ggatcgaggt t | tagtaattt aggctagaac ctagaaaaca aaagcatgat tgattagaga 24 | 0 |
| aacatcttta t | atacatcag ctggtttgtt agaaagaccc aacatcttta cgtactgttg 30 | 0 |

| tcaatctta | c ttacttgcat ttttactgtt tttagcgtag acttagttta attctattct | 360 |
|----------------|--|-----|
| aaatcatcaa | a ttatcaatgt ttctttcaac aatgccttat ttatgaattt aaccctgtct | 420 |
| aagactagtt | ccctgagttc catactcaga ttcatccatt ttaattttaa atacttgacg | 480 |
| atccggtgcg | g ctttctcgca aaccgaattt cccttgaaca tatttgtata aagaaaaagt | 540 |
| ggaccaaaaa | gtaactgcag gggaaag | 567 |
| | | |
| <210> | 6305 | |
| <211> | 616 | |
| <212> | DNA | |
| <213> | Glycine max | |
| <223> <400> | unsure at all n locations 6305 | |
| tcttatccaa | ggctcatctt ggtggtgaag ttccttcttc catggcttat tccctagtgg | 60 |
| atggcgcctc | ctctcacctc ttctcctttg tcttccactg catctccatg gtggaaaatc | 120 |
| accattaaag | gacctcattg aagctcaaag atccagcctc catagaagct tcacaagcaa | 180 |
| gcttccatca | agtggtaatc agagcacaag agctttaagt aggtgctcct taaacctcca | 240 |
| ttaatctttt | actitacett etetteeatt gitgittett cattitiete catgiatete | 300 |
| | ttgtgctaaa tgttgttagc atgattcttt agagtttcca ccgattaaac | 360 |
| | agctagattt gatttttatg gttcagattt cttggtcttg ttcttgaacc | 420 |
| | ttaagtttag gttcctttga gttttgtctt gttatttttt gtggctgaaa | 480 |
| | anaattetta caaatatatt aaagtagaag aaaaceteaa aaatetagag | 540 |
| | acctattgta gttctttcat agaagtcatg tctagtcatg aaacttgtca | 600 |
| cataagaatt | cttatg | 616 |
| <210> | 6306 | |
| | 504 | |
| | DNA | |
| <213> | Glycine max | |
| • | 5306 | |
| | gaactacat ctgtatgatt cttacggatg aagttcatcc gtatgaagca | 60 |
| | | 120 |
| aaatttagat t | taataacat tattaatatg tttaattttt attacatatt tttgaaattg : | 180 |

| tggataattt atttattaca aattatttat agtgtaagta aaag | gattaaa ttatttaggt 240 |
|---|------------------------|
| acaataattg aatttatttt aactagtaaa atgttaaatt agtt | tgttagt tatagttttc 300 |
| tatatttttt tttgataatt agggtgcaaa atttttattt attt | gaagta ttttttatgt 360 |
| taaatgagat gttttctaaa aaactttatt attggggttt tgga | aggeeet ggegggaaat 420 |
| tttttgtaga atttataatt atttagttat tgcaaattaa ttaa | igttaag gtaaaattga 480 |
| atttttaagg gcaaatttgt atta | 504 |
| <210> 6307 <211> 523 <212> DNA <213> Glycine max | |
| <223> unsure at all n locations <400> 6307 | |
| tgtttgaagg acagattctc attatacaaa gcttgctgga actag | gttcag caaaggccag 60 |
| ttatgagtgt agatcagttc attgacaatg tggcctggcc | gcctga ccttcttttg 120 |
| tgggagataa tgaaagtttt acagcccagt cacctcaaca acatg | gagcca taaccagaaa 180 |
| cgatcactca tttgaagcca ccatccctcg agctgttgat ttcgc | caaaaa gaagattaga 240 |
| gacgagatet aatgaggetg etcateetat accagtgeea ceate | agctg acgcaccatt 300 |
| tccaggagtg gatccatctt caccttagca tgcatcagac tcttc | cacto ctatottaga 360 |
| gatacatgag ggccattgtt tattatcatg cngccttttc ttgac | |
| gacacccatc gttaagcaat ccgtgaagtt ctgcgacatg tcggg | agtcg aaatgaaaca 480 |
| tttattgcgc aatccataaa gtttcgtaac attccagatg ccg | 523 |
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| <400> 6308 | : |
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acacaagaca taatacactg attacaagtt attaggttat ctggtcattt gggtcaaggg 180

| ttgtttgt | tt taaattaaaa atagaggtgt gcgcaaggtt tgaagcaaat gcagaagtaa | a 240 |
|----------------------------------|---|-------|
| ccattgta | gc tagttgctag tgtcatgtta gttatgcatt acgtatgcat gcttgatca | 300 |
| tatgtett | aa attcacatga agccaatttc cattttggat atgta | 345 |
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| ggcttgacc | a cgacaactet ggaggeggtt aggggcaatg gtgtatecaa taaacetgtt | 120 |
| gttcataaa | t aaagaatata tcataccgag accgacataa atgaactcac gtaatcattg | 180 |
| cataattgt | t atactatata cattgaatgt acctgttcaa aatgattaac accattttac | 240 |
| cgacatata | t ttgcggtgcc tataaaatta agaggtggtt aacttctacg agaaataaaa | 300 |
| cacagcatt | g ttcttggtaa accgaacaaa gtttaacttt tacagagact ccataagagt | 360 |
| tcatgattat | t ataaatatac agcccnangg acctatttgc ctgttatgat ctagcataaa | 420 |
| gatctagtat | atttaaaccc ctgaattatc aaaaacatct gtacaatact atgtattaaa | 480 |
| cttactataa | a gtcaggtcac actttaattt atcaaaatct ttgtgcaacc attagaggat | 540 |
| gtacttctta | gccaccaget tgaccattac aagtttttca ccagtacggc cacaaatett | 600 |
| cccctactta | tataaacgca gatgaccacc tactatattt tcgacccttg tcaatgcacc | 660 |
| gcccaactgc | gctcttcata aggtcacagc aaatcacctt ctaacttctt acacgtctag | 720 |
| cacgctcaac | tttataacta ttctgcccg | 749 |
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| <211> | 506 | |
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| | taacacttgt tgtaactttg atgaatgaga gtcttgtaag acacaactca | 120 |
| aagttcaact | tetetecatt titetteett caattiegtg eteeecete tetetitte | 180 |
| | · | |

| tccctcttt | ce tittecteca tigaageate etetecaage tiettataca aggeteatet | 240 |
|-------------------------------|---|-----|
| tggtggtga | aa gcacettett ecatggetta tteeetagtg gatggegeet eeteteaeet | 300 |
| cttctcctt | t gtcttcctct gcatctccat ggtggaaaat caccattaga ggacctcatt | 360 |
| taagctctt | c atccageete catagaagee ecacaegeaa getteeatea agtggtatag | 420 |
| agcacaaga | g cttcaagtaa gggctcctta aacctctggt aattttttgt ttaccctctc | 480 |
| ttctattgg | t ggttcttcat ttttct | 506 |
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| actctcagco | c acttatgata gccgccaatg atcccattac tgcttcccct aagctctctg | 120 |
| tcctttcttc | acgetgeate ceatgeettg egaacteett gaagtaceet egtgttgtgg | 180 |
| tcactgaaac | c cccgtgcgat gaaaggcgtg atgcattcgt ctgatggcac ttctctcatg | 240 |
| gggtagccaa | gctgtcttat ggcgaggacg ggattataat taatacaaca ccttgttccc | 300 |
| atcaagagaa | catttggaca teettegeat gaagatagaa tettgattet teetteette | 360 |
| tagcgaggga | accaattaac agacgcctct ccatgctgcc aaaagttggt cccaattcgc | 420 |
| ctttcctttt | tcgatgcacg agcggtgacc ttgtagcgga tagacgggcc taccttcttg | 480 |
| gagaaaaaag | gtgtgaaacc agccacacat agagagccag tgcacaacaa acaattcttg | 540 |
| cgctgctctt | ttcacatnct ccgtcgaacg tgtcatacat ggccaaaatg gcga | 594 |
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| agcttgtaac | agttgtgaat catgccgaaa gtatgtaaaa gtagttcatc tctgttttct | 60 |
| | Cacaagtaat gogaagatta aggaagatta | 120 |

| | | | | | _ | |
|--|---|------------------|------------|--------------|------------|-----|
| taaggtcag | t cattaaaaga | aatgcctaaa | ctagtggagg | g agactgcagt | gactaaagag | 180 |
| agcacacgg | c tctacggact | tgcaattgca | atatatcago | ctacttataa | ttatatttt | 240 |
| ctaatatga | t tccaagttgc | aagaattctt | cattgagtaa | cctcattgag | tagctatata | 300 |
| tgcatatage | c tacattgttg | acatttttgg | caagaataca | tcttggaacc | tctaagctaa | 360 |
| tcaacataca | a aacaagagct | agaagagaaa | aaaccatttt | tcacataacc | tagaatgata | 420 |
| aagaggttca | a tatagcctta | cattaaatat | cagtccctta | atactatata | atacttgtac | 480 |
| accattgaat | gaaatatg | | | | | 498 |
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| | gttgagaagg | | | | | 120 |
| | ttgtcctaat | | | | | 180 |
| | accagatcca | | | | | 240 |
| | gtcttataat | | • | | | 300 |
| | aaatggattg | | | | | 360 |
| | tagactatct | • | | | | 420 |
| | tggaaaagga | | | | | 480 |
| tgaagattca | aggtcataca | ctgaagctac | cagtttacct | acttccaatt | tctggtgctg | 540 |
| atctantgct | tgaggctgca | tggttggcaa | caattgggcc | tgatcttttt | gattatagta | 600 |
| ct | | | | | | 602 |
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| | | | | | | |

| aggcttttct | tgcttttttg | tccttgatac | ataattaggt | tggcaagaat | cttcatgttc | 120 |
|-------------------------|--------------------|------------|------------|------------|------------|-----|
| tcagtcagat | agagggtgtt | gacctagata | tgtacaaaga | tgttgtgctt | cccagagtac | 180 |
| tggagcaggt | ctaattgctt | tattgtttct | atttctaatc | atcaaagaca | tggttaactt | 240 |
| tctaaccata | aaaaaaaacg | attccttttc | ctcaattatc | atgggcaggt | tgtgaattgc | 300 |
| aaagatgagt | tagctcagtt | ctacttgatg | gattgtataa | ttcaagtctt | ccctgatgag | 360 |
| tatcacttgc | aaactcttga | tgttttgttg | ggtgcttacc | cccaacttca | agtcagtgaa | 420 |
| cttgcacatt | tttttgtatt | acttctggag | gatgccttaa | tgtatatatg | ttttttctca | 480 |
| ctccgaaaca | tgaaaattca | ggttagtgaa | cttgcacagt | tttgttttac | taatataata | 540 |
| atattatatt | ttattgggaa | aaagcccaaa | ttaaatattg | aa | | 582 |
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|-------|---------------------------|
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| <213> | Glycine max |
| <223> | unsure at all n locations |
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| aattttattg ttaaacaata ttttacacta actttaagat ttttataaaa acgaagtggt 84 | 0 |
|---|---|
| ggtcg . 84 | 5 |
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| gccatgaaag tatcctttca aagagatctt cattaaggtc atcaagagaa aaggtgttga 120 | 0 |
| agagtacacg ttctccattt tctggtgatt ttctcttcaa gtttacactt acatgctgat 180 | Э |
| cattacattc cattgttgaa caatctgtgg agaaccacaa agaaatcaga tgttaccaag 240 |) |
| caatcagett ttttteeatt teeaaageet aeggtaetaa attaetaate teaaaageea 300 |) |
| aaccaaaggg aatgaaaatt tccaattcga cccttatata tatatatat tatatatata 360 |) |
| tatatatata tatatatata tatatata tatatata |) |
| aaaaagaggg gccctgaata ataaaactct aaagggaacc ctctcgggca aaaataaaaa 480 |) |
| acatecegee tttttttte ecaaaaette tteeteete tetttttaga eatatttett 540 |) |
| accataacga tttgtccacc ttcttaacaa aataagcccc ctctgccggt cctgagaaag 600 |) |
| aattttttt attgtgtgac coctetttaa aaaaccete tttttttgaa aaacceetet 660 | 1 |
| ttgatcaaac aaaaccccct ccttccaggt ggtttttgca cttaaaaaaa aaaaaaatat 720 | ļ |
| tcttcccctt ttccccgggg attaaat 747 | |
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| caaattgggc teetttgage ceateagaea aaatetaatt gaaataaatt aggetaettg 120 | |
| aactcacttc acacaaataa tgttcggtct aagtccaatt tacaaacgtt cagaca aaa 180 | |
| caaaaagaag aacaaaaaaa aaagaaatac gttaaagtta aaataaatga tar aa 240 | |

| aaaagagtc | actttctcg | g caaaattgto | aagtcttggg | ttggtctcct | ctgcaccttc | 300 |
|-------------------------|-----------------------------------|--------------|--------------|------------|--------------|-----|
| atcaccatt | ttcaaactt | g cactccaaga | tactgttgtc | aaaaaaatag | g ctaagcaatt | 360 |
| gaatcagaga | a ctagtgacto | g gtcacaaatg | , aanaatggct | ataaatatto | g atactgaaag | 420 |
| taggttacgg | gttcaaaaat | aaataatact | gtatttgaaa | gataaaaaga | a gagagcaatt | 480 |
| ttgtgagtg | g atgttagtgt | gatgaaagag | attgaggcaa | gcaagtgctg | cccggctggg | 540 |
| actgcgagta | a ctattattco | taacacggtc | aacaaatata | tgcctcggaa | ttataaatac | 600 |
| tatgggttaa | atat | | | | | 614 |
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| gaatctttag | gaagaagttt | ccaaattgaa | acaaacaaaa | ggtttgacca | aagaattcta | 120 |
| tcatttcaaa | ttgagatttg | ctctctggta | attgattacc | agtagttgaa | aatgttttaa | 180 |
| tacaattttt | taaaacctgt | aatcgattac | ataagtcttg | taatttgatt | accagagggg | 240 |
| attttcagaa | aataatttcc | aagagacata | tctattcaaa | tgttttatga | acgaccactt | 300 |
| aaatgtttta | aagagagttt | ttattgccca | aacaagttta | tcctctcgaa | agatcaagag | 360 |
| tttttctgaa | ctggaatgtc | ttatcctctc | aaaaagattc | ttgggcaacc | acttgcttat | 420 |
| ttataaggaa | tttttgattg | atctttattt | t | | | 451 |
| <210> <211> <212> <213> | 6319 616 DNA Glycine max | ĸ | | | | · |
| <223> <400> | unsure at a | all n locati | ons. | | | |
| tgatttgtga | gttgatttta | gccttaattt | cactttgttt | attaatcaat | tgatccaagg | 60 |
| aaacttccaa | agaaaaacgt | ccgattgatt | tttttttatt | attttattca | aagatatttt | 120 |
| gattatttta | ttattatttt | tcaagatatt | ttgattattt | tattattatt | tttgcttttt | 180 |

| ttggtttaad | c cgaggttaaa | acgtgaacga | tcgattagat | tttgttttaa | cagtgattaa | 240 |
|------------|--------------|--------------|------------|------------|------------|-------|
| accaaattac | aacgcaaatg | atcgattgaa | attcatttta | tcatttatta | agtgagaaaa | 300 |
| cggcttaaac | aatcggttaa | agctcgttac | aaacggaaga | aaagaaaccg | aaagtgaaca | 360 |
| aaataaagat | gaaagcttaa | aaaataagaa | atgaattgaa | agtctcggat | tcaaaaactt | 420 |
| acccgttgaa | gaacgaagaa | cggatgaaga | acaatgaaga | acgacggaaa | accttcacgg | 480 |
| attcgctcat | ggaaacgtct | cggaagcgtt | acggaagcaa | ctcggcttgg | attttcttca | 540 |
| cggaaacaat | ttttttcacc | caaaatagct | gaaatgcata | gccagnggga | tganggatca | 600 |
| ttggaacagt | cccatt | | | | | 616 |
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| <212> | DNA | | | | | |
| <213> | Glycine max | ζ ΄ | | | | |
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| ggttnnaggt | tr ccct | aactcccct | cgcttgtaat | atncaacitt | gttgtagcag | 120 |
| tgaaagctta | ggatagtaac | cttagggtag | aagacgagag | tagaagacgc | cagaaaaaat | 180 |
| ggggaaaggg | ggcttacgac | ggcggcttcc | ggaagatccg | ttaggggttc | thorqgaact | . 240 |
| tccggaagaa | gctgttccga | aaacattctg | gaagaagtat | tcttccggaa | ga 1 | 300 |
| gtcttccgga | agaattccgg | aagaagggtt | tttccggaag | aattccggaa | gaagggtt., | 360 |
| tccggatgac | ctttgagaat | tccgaaagaa | ctttctggaa | gaaagtggtt | tttccgaaff | 420 |
| aatccggaaa | aaacacttct | ttcgaaagtt | tttt | | | 480 |
| taaaagaacg | aataaataat | tggtattga' | <u> </u> | uugagayuua | иааичлааад | 540 |
| aaggtttgaa | atttggtttt | gaaaataaaa | yggccgccgc | ccccccccc | cccacccccc | 600 |
| ccccttaaat | aattgaattt | ttttaaaaaa | aaatcggcaa | cccccacaa | gaaagggttc | 660 |
| ccc | | | | | | 663 |
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| <210> | 6321 | | | | | |
| <211> | 653 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine max | | | | | • |

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|-------------------------------|-----------------------------------|------------|------------|-------------|------------|-----|
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| attaaaagct | ttcttttcag | atttctccat | tcttttcttg | aaaattggac | aatcaaccct | 120 |
| cagatgtcct | ggttgattgc | attcataaca | ttttggagta | gaggatgaat | cttttgccct | 180 |
| tttctttgat | ttgaaatttg | ttcttctttg | atttcctcta | actcttagaa | atttgttgaa | 240 |
| tcaatttaca | aaaagactga | gatcatcatc | ttcgtctatt | ttatttgaat | cctctttatc | 300 |
| acgtccttct | tggattgaag | atgaagcttt | aagagcaatt | cctttcttt | tcttaccatt | 360 |
| ctcctcatgc | tgattcaatc | tcattaattc | catttcatgt | cctgcaactt | cccaaacaaa | 420 |
| gtagcaagag | acatgttaga | aagatccctt | gattcagtaa | tggtcgatac | ctttggttgc | 480 |
| cattccctgc | ttaagcatct | caaaacttta | ttaataagat | cttcatttgg | aaagattttt | 540 |
| cctaaggatg | ccagatgatt a | aattatgtgt | gtgaatctct | cttgcatgtc | ctgtatgngt | 600 |
| tcattaggat | ttcatctaaa 1 | taattcatat | tcatgagtta | aagtatctat | cct | 653 |
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| agcttcatgt | agctttttct a | agaagcttca | ttaagaggct | tcctccagaa | gcttcctcat | 60 |
| | agaagctttc t | | | | - | 120 |
| cacccctcta | ttaactaaat t | aacttcctt | aaaaataatt | accgatgaaa | ataacgcaac | 180 |
| aaatattcaa | acatcaaaca t | aattactaa | tagtatatag | atatatatat | atcagggtgt | 240 |
| tacaactctc | ccaccctttt a | ıgaaatttcg | tcctcgaaat | ttaccttact. | caaacaagga | 300 |
| tgggtgagct | tctcacatct g | actttctaa | ttcccatgtg | gcatcttctç: | ctgatgcacc | 360 |
| tccccagatc | accttgacca a | cagaatctc | tttccctc | | | 398 |
| | 6323 632 DNA Glycine max | | | | | |

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|-------------------------|---|-----|
| tgtaggatta | tggggtaccc atcacatgtg gtactaggtg gcggtcgagc gatggtgcac | 60 |
| aacaagtttt | ccacatccac aaagcgcgca taaacccacc atcccctgtt gcccacctcc | 120 |
| aactgagctc | acgtactccc acgtagccca taacctcgtt tctctcaaca ccgggtcccc | 180 |
| atcaatcctc | ccaagcttcc ccaacatcaa agtaaatcaa cattcaaaca gcacaaatta | 240 |
| ccacagccaa | gaaaacaggg caaaggcaga aaactctgcc caaaacacca accaaaatca | 300 |
| cagcttttct | cacttaaaga ccccagtaac aattccttcg atccaattcg ttaaccgttg | 360 |
| gatcgactcc | aaaattttac tggaagtcta tagtacataa gcctacattt tgaccgttgg | 420 |
| gatctactag | caaacatcca gaactcattc tgcactactc tttccacagc caaccacaca | 480 |
| caagcatttt | tctgcacaaa gccaaaatcc tgctgcacct attttgacag canaattctg | 540 |
| cataagtgca | gaattcgaan natcaccctt ctctcatcca atcttgccca aatcanatcc | 600 |
| tacaagtccc | aaatcatgta tcaatcatgt ct | 632 |
| <210> <211> <212> <213> | 6324 577 DNA Glycine max | |
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| aacaaaataa | aattototot otaaattotg aaactttoto tototootto (ttgotga | 120 |
| acagaaccta | agcaaaacaa aagctagaaa atttaaaata agcaaggaat gaggcacaat | 180 |
| gggtttgagt | atttaaattt tgagtgttga atacatactc aatt***** | 240 |
| ctaacattgc | ctaaacctta catagaaata atgataaatt gacccactac aagaaaaatg | 300 |
| tttatttccg | acgaaatttt tcccacggaa aatatttcat cggaaatgct gaa | 360 |
| atggaattta | ccgaaggaat aatttccatg ggaaattagc aaaaaatcga to etgtttt | 420 |
| tgacggtcaa | ttattctgtt ggaaagttga caattccgac ggattatacg aacg: .atgt | 480 |
| gtatctgtcg | aaaagtaaat ttcccaaaca tatgatgcga acc cc atrgaytcac | 540 |
| | | |

| <210> <211> <212> <213> | 6325 702 DNA Glycine ma | ıx | | | | |
|----------------------------------|----------------------------------|------------|------------|------------|------------|-----|
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| tgactttaaa | ccttgacatt | ggatccttca | actcatgaag | tgtttctagg | tccttatgct | 60 |
| ctttggatag | ttctatatta | gatatatccc | tgacatatca | tcatatatct | aaccaatgat | 120 |
| atactacata | tttatatata | tatttttaa | accaacaaat | aatttatata | ttatgggtat | 180 |
| tagagatacc | atcagttaca | taaaataatc | ctcattgatt | aattggtatt | gcttctagtg | 240 |
| attgaataat | gatatctatt | aactagtagt | ttaaattata | ataattcgca | taaaaaatct | 300 |
| ctctactcta | ccacagcttt | gcatatatgc | acactttcac | caatatttca | taggcccacc | 360 |
| ttgtttgttt | ctaaattatc | cacatttatt | cacagacact | tccactattt | cattgctaga | 420 |
| aatactcaaa | ggccgacttt | gcacatgcat | agcgttatac | taataccacg | tgttagacag | 480 |
| tgttgtgagt | taggtaccta | tgtgttggat | gataatttct | gaatcacgtt | attattttt | 540 |
| gttaaaagtt | ctttaacttt | tttctctcag | cctctatttt | tgtccttgca | ttcaattata | 600 |
| tcattgttat | ttaactctgt | taattgaatg | tggggctaaa | agtagaattt | ttaagaaaaa | 660 |
| aattggaaga | aaatgataat | aatcattgga | ctaattttat | ct | | 702 |
| <210> <211> <212> <213> | 6326 505 DNA Glycine ma | . | | | .* .* | |
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| tggtggtgaa | cctgctgtgt | atgatgtttc | tccctccatt | gtgatttctc | tcaactcaca | 120 |
| gatcccttaa | tgataagagc | tctagatacc | tatttgttgt | tttttttaat | aacagcaggc | 180 |
| agaaatatta | aagaatgaaa | gggagcataa | agtäagaaat | tgagactgca | aaagcttgtt | 240 |
| ttattctgat | atgaagcaac | gtatttaaaa | tcatggaaaa | gatagtaact | gctaacaaaa | 300 |
| agataacacc | actaacagat | catgactaga | gaataggatc | aaaactgctt | tatcctatca | 360 |
| gtcaacatga | cttttatttt | tcctaaaaaa | tagcaaaaga | atcttatcta | ctatagtttg | 420 |

| | ttaaacagtt | : tcaacagtca | a catcttaaca | attcaaaaca | a aaattgtgat | aaactcatcc | 480 |
|---|----------------------------------|-----------------------------------|--------------|------------|--------------|------------|-----|
| | cttacatcta | agtgactccc | atgtg | | | | 505 |
| | <210> <211> <212> <213> | 6327 506 DNA Glycine ma | ıx | | | | |
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| | tattctactt | acaaaatcga | gtgtcaattc | ttgaagaaag | , tataaagacc | acctctctga | 60 |
| | tattaccaat | ttgataattg | agaacaaagg | ctcaagatto | : ttcaatgtac | tctaaaattt | 120 |
| | ttttgctaag | taaacaaaaa | ttagattaac | tacaaaagct | aactagtaat | ctgttaaaaa | 180 |
| | aaaaaaacct | cttctcaacc | ttgcattttg | taatggaaga | aaacaaatta | aaatatgcaa | 240 |
| | tgataaagaa | aaagttgcag | acaataatat | aaaagaagac | aggagatcat | caatgtaatt | 300 |
| | gtggttaagt | tctggtgttt | ctgcttttat | ttcttagcat | accaagccca | tccattatat | 360 |
| | tcaaaataaa | ttttttagtt | gttatctaag | aactttctaa | ttattgaaaa | gtatgtatgg | 420 |
| | acacatattt | tttcaacaga | tctacttggc | attttttga | aggagttcat | tacgttacta | 480 |
| | ctgcactctt | aattttttgt | agtttt | | | | 506 |
| | <210> | 6328 546 DNA Glycine ma: | × | | | | |
| | <223> <400> | unsure at a | all n locati | ons | | | |
| ć | agcttgtttg | aaggacaaat | tcttattatg | caaagcttgc | aggaactagc | tcagcaaagg | 60 |
| (| ccaattatga | gtgtagagca | attcattgag | aaggtggcct | agcctggaac | ccgaccttct | 120 |
| t | ttgtaggga | ataatgaaag | ttttacagcc | caggcacctc | aacagcatga | gctagaacta | 180 |
| ć | gaaaatgatc | actcatctga | agccatcatc | cctggagctg | ttgatttttc | aaaaagaaaa | 240 |
| t | tagagacga | gatccaatga | ggctgctcat | cctggaccag | tgcccatacc | agctaactct | 300 |
| t | ccactccta | tcttagaaat | acttgagggc | cagaccatac | tagtcctggt | tctgggcact | 360 |
| t | ctcctccaa | ctactccagt | attgcaccaa | acagataaag | aggatgttca | ggcatangac | 420 |
| а | itctaggact | agtaacagga | attttgattt | ctgatgatac | tttttacttt | ttaatttatt | 400 |

| attattatta | a ttttgggtt | t cgtacagatt | tcctttaggt | ctacatacac | tactagtttt | 540 |
|----------------------------------|----------------------------------|--------------|------------|------------|------------|------|
| atttat | | | | | <i>•</i> . | 546 |
| <210> <211> <212> <213> | 6329 665 DNA Glycine ma | ах | | | | |
| <223> <400> | unsure at 6329 | all n locat | ions | | | |
| tcctcggggc | catteetge | g aaggcaaaca | tttggaaagt | taattttacc | agtgggacac | 60 |
| tactcttaaa | gcaaaaatgg | g catataacct | cctcccataa | atacaaacat | caatgtaaat | 120 |
| ttagagcaag | cttatgcgca | tatttcctta | cgaacgttct | cttgcacaag | acattctatt | 180 |
| aactaagaaa | aatgcaccca | ı tacacaatca | aggcagcttc | gttacctaga | ttatttacac | 240 |
| gtacttccaa | ggtgtatttg | ttacttacat | cacacacatc | tccttggcta | aatttacata | 300 |
| caggcatact | caaagcattt | tggggtacca | aaaattgcac | atgtgcacat | cttggtattt | 360 |
| ctaataccta | tacatacgca | aacttcatga | tgaatcttga | ctatcttcac | aaaaaggtgc | 420 |
| tacatttcat | gcttttttt | tttcaagttt | ttgctactta | aagccgcatg | caaattcaag | 480 |
| catattttcc | tttgctgact | aaaatcgtat | tcaaattaaa | aggtatattt | tttgtaatat | 540 |
| gttttcttca | cataacatgc | aacacattta | tatacatttc | ttgtgagaca | tntttgacta | 600 |
| ccaaaaattg | gatatgcata | cattcaatat | ttttgtattc | atacccaaag | tgcaaattgc | 660 |
| caaag | | | | | | 665 |
| <210> <211> <212> <213> | 6330 303 DNA Glycine ma | x . | | | | |
| <400> | 6330 | | | | | |
| agcttgaagg | caaactggat | gcattggtta | acttggtaac | ccacctggcc | ttgaatcaga | 60 |
| aatctgtacc | tgtcccaagg | gtttgtggtt | tgtgctcctt | tgctgaccac | catacagacc | 120 |
| tttgcccttc | catgcagcaa | cctggagcaa | ttgagcaccc | tgaagcttat | gctgcaaata | 180 |
| tttacaatag | acctcctcaa | cctcaccacc | taaataaaa | 2022000 | | 0.40 |

| tcttc | agcaa | cagatacaac | ccttggatgg | aggaaatacc | ctaacctcag | atggtccagc | 300 |
|---------------------------|-------|-----------------------------------|------------|------------|------------|------------|-----|
| cct | | | | | | | 303 |
| <210><211><212><213> | | 6331 515 DNA Glycine ma | × | | | | |
| <400> | | 6331 | | | • | | |
| tctat | agtta | tggaataatc | gattatcaaa | tgtggttatt | gattactacg | atacacgaag | 60 |
| aactc | ctaag | gtttcctaac | acaatataaa | tgattactaa | acgggggaat | caattatctg | 120 |
| gaacca | accac | gacttccttc | tgttggaact | atcttatgta | atcggctact | aaaaatggta | 180 |
| atcata | ataat | ttgatgattc | ttatcaaatt | tcaagagaag | tgagttttgt | tgcttgctct | 240 |
| aacact | tatgt | aattaattac | caaacttggt | aatcacttac | actatgccga | attcattgct | 300 |
| tctaag | gaaac | tatgagatta | atacatttat | cttatcatgt | tggattccta | ctaaacctat | 360 |
| atgata | aaaac | taacgtctag | agcacttgac | ctgcctagtc | taaaaacatt | tgatagaaat | 420 |
| gtcaca | atctt | aaaacacttg | tttggcgtcg | taaacttatt | aaaaccaaca | gatcctaaca | 480 |
| ctatto | cttca | agtcttcaat | cactttgatt | caaca | | | 515 |
| <210><211><211><212><213> | | 6332 528 DNA Glycine max | × | | | | |
| <400> | | 6332 | | | | | |
| agcttg | gaagt | gaaaaatgtt | aactggagca | acccaatttt | tacatcaaag | cctaatcagc | 60 |
| atcaac | cacta | ctattttaat | ctttttctca | taaaggattc | aatcctactg | atgttgtggt | 120 |
| gcaaca | igagt | aatgcaaggt | ctatttgatg | ccagtaagta | atccttttat | ttccaaattc | 180 |
| agagca | attc. | caacaaaagg | ttccatgacc | aaccctaatt | attaaagaac | tcagttcact | 240 |
| gatatg | tatg | aataaatgat | gcaagaaagc | atgcaaacta | tagaacaaca | aagaaattgt | 300 |
| ttcttc | tgca | gattctagat | aatgccaaag | cctaaagaaa | caagctaaag | tattatggtt | 360 |
| cacttg | aaat | attaaagtgg | aagaaatgta | acaagtaata | ttgttttttg | atgcatcaga | 420 |
| acaaat | gcaa | caagtaatat | gatgctatta | tacatcacaa | atatagetta | aaataaaaaa | 480 |

| caaaagggag | gaaaaggaaa | actccattta | ttggactaaa | ccataaaa | | 528 |
|----------------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| <210> <211> <212> <213> | 6333 362 DNA Glycine max | ĸ | | | | |
| <400> | 6333 | | | | | |
| tgtaatttcc | ttctttttcg | atattttgag | gtgacaaaaa | gatttgtatc | aatggtgggt | 60 |
| acataaaatt | cagaagaaaa | atattattgt | ttaagtgtgg | ttatgtagtg | gctaagtgga | 120 |
| gacatgatct | gaataatcct | tctactagtt | cataagtgga | ttgtctctgg | agtaaaatag | 180 |
| ggacaacgga | atgcacaaag | atgggggttg | gtggctagaa | accataatgg | aaatacgaga | 240 |
| ggctttaggt | ttccaatgac | cccttcaaag | cagtttttga | agaccaatgg | cgtagatgaa | 300 |
| gtcccttatc | agttggacat | tcatatttct | aaagatgcag | ttgaataata | ctagcattct | 360 |
| at | | | | | | 362 |
| <210> <211> <212> <213> | 6334 458 DNA Glycine max | · · | | | | |
| <400> | 6334 | | | | • | |
| agcttcatga | tgaatcaaga | ttgattcaaa | gaagttttga | tgataacaaa | ggtgatgaca | 60 |
| aaaagttcaa | agatcaagaa | aaacttcatg | ataacaaaga | tgatgatctc | aagaatgaaa | 120 |
| gaatgagttc | aagatgttca | agattgaatc | aagaacactt | caaggttcaa | gaggaaattt | 180 |
| gatttcaaga | atcaagaatc | aagattcaag | gttcaagctt | ccaagaatca | agatcaagat | 240 |
| tcaagactca | agattcaaga | atcaagataa | gtatgaaaaa | gttttttcaa | aaactaagta | 300 |
| gcacatggat | ttttctcaaa | acttgtttac | caaagagttt | ttactctctg | gtaatcgatt | 360 |
| accagattga | tgtaatcgat | tactattagc | aaaatgtttt | tgaaaaagat | ttcaactgaa | 420 |
| tttacaacgt | ttcaattgat | ttcaaaatgt | tgtgatcg | | • . | 458 |
| | 6335 600 DNA Glycine max | | | | | |

| <400> | 6335 | | | | | |
|-------------------------------|-----------------------------------|------------|------------|------------|------------|------|
| tgttggccat | ggatgagatc | aactttgttg | ggggaggaag | catttcttat | aatcaataac | . 60 |
| ctaggcaaaa | tcagaggctt | agaaaagaag | agagaaaacc | aactcttcaa | gagaccatgc | 120 |
| ttcaatatat | ggcctagaat | gaccaaagaa | tgaagttgtt | gtcccaattg | accaacatac | 180 |
| aatccctctt | atcacaaaga | aagtcaagca | accttcacaa | cctaaaccaa | atcctaagaa | 240 |
| ggaggatgtc | aatgctgtga | tgactagaag | caagatgatt | caaaaggact | ccgaggagaa | 300 |
| tgaaggttct | ttcccaaaaa | ctgtagatga | catccttcta | agaagaacca | agcaactagg | 360 |
| aaagttaagg | ttcctactga | tgggaatcct | atggcaagca | agaagggtga | gaaggaggta | 420 |
| ctgacacctc | ctcagataag | tgttcctttc | cttctcaaat | gaagaccatt | gtgactgagc | 480 |
| ctcacccaag | tgtggggaag | gaagatcctc | caaggaagac | agtcattcca | aaagacccta | 540 |
| gatggagtaa | gaaaaatgga | gatagcatca | ccattcaaac | tcttggctat | ggagtagatg | 600 |
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| agcttggata | aggtagcttc | ggcagtgtgt | actggggtca | actttgggat | ggatcacaag | 60 |
| gacgactata | atttttattt | agttagttat | tgttgtgatt | gttattgtta | ccgttacgca | 120 |
| tcttgtgaaa | tcagctggat | ttctgagtct | tctaaggtta | ttcttgctca | ttttacccgt | 180 |
| ggatggggg | atctagtgat | ccatttgctt | taataatata | tttgggtggc | tttagatgtt | 240 |
| aactaaactg | catattcgta | agatgatgaa | ccatatagat | gagttttctc | agacacatgt | 300 |
| tcttttcaat | aatggcatac | attgacagat | ctagtaagtc | acgtgattat | tccccttcct | 360 |
| tgttattttc | tttacagttc | ccatacttgc | ctaaact | | | 397 |
| <210> <211> <212> <213> | 6337 557 DNA Glycine max | | | | | |
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| tgtaatgcac | ctgatgacat | acctaagact | gtcgtacgaa | ctcttaatca | gggttcatct | 60 |

| cctatgagca | a tggactttca | tccaattcaa | a caatactttg | cttcttggtd | tgctgctctt | 120 |
|----------------------------------|-----------------------------------|------------|--------------|------------|--------------|-----|
| ctaaaggctt | tttaataaca | ttgatttgat | ttatcacttg | catgtttttg | , ctatcaagtt | 180 |
| tcaatttgad | ttttatttga | tgcaatatgt | cagttggtac | aaatgtgggg | gacattgctt | 240 |
| tgtgggaggt | gggttctatg | gagcggttgg | cctcaaggaa | tatcaaagtt | cgggatctta | 300 |
| gggcatgtco | aatgccattt | caggttttct | ctttacctta | atgtatgaat | gatctttata | 360 |
| tgaatttgtg | cttacctctg | agactgtcat | gttgtcatga | ctgaagaaca | ctaattatga | 420 |
| tcaatgcacg | cggctcttgt | caaagatccg | ggcgtttctg | tgaatcgagt | gatatggagt | 480 |
| cctgatggag | cattgtttgg | taaactgaga | atttataatt | cttcaatgtt | taaatgatat | 540 |
| gatatagaat | accttga | | | | | 557 |
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| <400> | 6338 | | | | | |
| agcttagtaa | agtttagctt | gagtgcaagt | gttagaatca | gtgttgtaaa | ttgcacaagg | 60 |
| ccaaaatccg | ccataaacat | atgģcggatg | gcatggtgga | caggaaaaaa | atacacacac | 120 |
| acataaatac | taaaaaaaca | tcagtgtggg | ggaatttaac | tcttgggtca | aggaagcaag | 180 |
| agtcgtgcat | tgtaggcctg | tggacaactt | cactcagcac | ttctctttgg | ctgcttcgag | 240 |
| ggctactaat | agaaagtgga | agatttggtg | gatagcagcc | acagtttcta | tttggaacta | 300 |
| taggaatgat | atgattttta | aaaatcaaca | gtttgtcatc | tctaagttgg | tggataatgc | 360 |
| aatttttctc | acctggtctt | ggttgagggg | gtgggaaaag | gactttgccg | tttcgtttca | 420 |
| acaatggtcc | tcaactatgt | cttttgcctt | cacctaatgt | gggaa | | 465 |
| <210> <211> <212> <213> | 6339 651 DNA Glycine max | | | | | |
| taggaaagta | taaagttgaa | gtggtctagg | caatgaaaat | agatcttatt | tgaaaatggg | 60 |
| | agttgcccaa | | | | | 100 |

<213>

Glycine max

| | • | | | | | |
|------------|-------------|------------|------------|------------|------------|-----|
| aaagataaac | aagagtgaat | gaaaagcaaa | ggtccacgag | ttctgtcatg | taagtggtca | 180 |
| aaattgaaac | tacatcaaaa | agccaatgcc | tttttgagaa | acaagataac | tcattgctga | 240 |
| atcttatcat | tcagtattca | cctctaataa | agtcgttatg | attacttcct | cttacaagag | 300 |
| agatgaacac | atttgaatgt | gaccatgtca | tcataaaatt | tgcattagag | gatccatttc | 360 |
| cctctcactc | ctttcatgca | acattgtccg | tttatgcacc | aatttttaag | gttgaagttt | 420 |
| aatgctggcc | aaattaaact | caaccatatt | gacacaggat | atgacaaaaa | aaccaataaa | 480 |
| gcagttaata | aacaatatat | gtataaatca | tactgatgat | ggcaattctt | gtcgagtagt | 540 |
| tttttccttg | ctgtagatat | ccacatgctt | tgaaaagtaa | ttcttaggat | tttgtaattt | 600 |
| atccttgatt | tttgcacaga | aagaaaacct | ttcactacct | gagattacaa | a · | 651 |
| | | | | | | |
| <210> | 6340 | | | | | |
| <211> | 606 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine max | ζ | | | | |
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| gaaaagaaaa | caatcaaata | ttatttcatg | agatctagta | aaacaaaagc | atttaacatc | 120 |
| tatgcaacaa | cattggtggc | aacaggticc | tagaccatat | gaagacagat | ccatcaccat | 180 |
| gctgagaaat | acaataggtg | gcatcctcag | tattgaaaaa | tgtgtcaaag | aaaaaaagct | 240 |
| gctaagctaa | ctaacaaggc | acagcacaca | gccaattgta | aaggagaaca | tgaagcagcc | 300 |
| taaactgaca | tcaaactgcc | acttgacatc | aagattaaat | ttgaaacaat | cagacgcaag | 360 |
| tggttgaaac | ttcacaaggc | aaagataaag | tgttgtaatc | ctagccacac | cttcatcaac | 420 |
| atcagtgcac | aaagctcaac | ctatttatga | aagacttttt | tccatacact | gctgtttgcc | 480 |
| cttagtatca | tgaaatccaa | ccaacaaatt | tgaggcaacc | cagaagagca | caacctaacg | 540 |
| aaacccactt | agttttttgt | aattgtagat | atgatgcaag | ccataatgcc | atactgagaa | 600 |
| atccaa | | | | | | 606 |
| | | | | | | |
| <210> | 6341 | | | | | |
| <211> | 674 | | | | | |
| | DNA | | | | | |
| | | | | | | |

| <223> <400> | unsure at 6341 | all n locat | ions | | | |
|--|--|--|---|---|---|---------------------------------|
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| attaaatatt | ttaatcccca | acatatgaac | acggaagatt | ccagccaaaa | gatataattg | 120 |
| aacacagaga | ataccacttt | tttttttggt | ctagaagaat | accacctgtt | taagagaaca | 180 |
| tgcatttaca | agttattggt | ggtttttct | tcttcttatg | atagcataga | agaatattat | 240 |
| tgtgaaaatt | ctgaagataa | tttgtcttat | cacatgaaag | tttgaggaca | caatttctgc | 300 |
| ccaaaacata | agctcccatc | actatctact | tcatcaacag | actacatata | tgtgatatga | 360 |
| ttctaaaaac | aaaacactta | taaacagcca | gttcagttaa | atccaagcaa | tacttttcca | 420 |
| agtctgccaa | cccttaaaat | atgggttaga | aaattaagct | cgcccgccaa | tcacatcaaa | 480 |
| aaggaaaatt | aaaacacgtc | cacaaaaata | tttaaatcaa | aagaaactca | cgctgataca | 540 |
| ttagtttgtg | gaaaaattct | gtcttcactt | tttccatact | nagggtccgt | gactgattca | 600 |
| tcagctaatc | gctatcaagt | ttcaaatata | tcaaccaaat | attgagataa | atgccacaaa | 660 |
| ataaaaaata | aaaa | | | • | | 674 |
| <210> <211> <212> <213> | 6342 534 DNA Glycine max | · · | | | | |
| <400> | 6342 | | | | | |
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| | | agtcacaatt | gagcatttac | cctaacttcc | acaagctacc | 60 |
| cacacatcca | ataatggcac | | • | | | 60 120 |
| | | ccatgtatgc | acaaaccaat | tctataagca | aaattcacaa | |
| atttatgcgc | ataatggcac | ccatgtatgc aaggcatttc | acaaaccaat accgaacact | tctataagca tggtgggtgc | aaattcacaa acttttgggt | 120 |
| atttatgcgc ataaacagga | ataatggcac aaatgccatt | ccatgtatgc aaggcatttc ggcaatgcgg | acaaaccaat accgaacact cttgcccaat | tctataagca tggtgggtgc catttcagaa | aaattcacaa acttttgggt cacaacctag | 120 180 |
| atttatgcgc ataaacagga gcctaaggcc | ataatggcac aaatgccatt aaggaatgag | ccatgtatgc aaggcatttc ggcaatgcgg acccccaat | acaaaccaat accgaacact cttgcccaat tcaacgaatc | tctataagca tggtgggtgc catttcagaa aaagcatgaa | aaattcacaa acttttgggt cacaacctag ttttccctaa | 120 180 240 |
| atttatgcgc ataaacagga gcctaaggcc aatgtctcac | ataatggcac aaatgccatt aaggaatgag atcccctaca | ccatgtatgc aaggcatttc ggcaatgcgg accccccaat aactatgtac | acaaaccaat accgaacact cttgcccaat tcaacgaatc aatttagagc | tctataagca tggtgggtgc catttcagaa aaagcatgaa ataaaaaggc | aaattcacaa acttttgggt cacaacctag ttttccctaa atcaatggaa | 120 180 240 300 |
| atttatgcgc ataaacagga gcctaaggcc aatgtctcac agctagagac | ataatggcac aaatgccatt aaggaatgag atcccctaca gaaattggtc | ccatgtatgc aaggcatttc ggcaatgcgg acccccaat aactatgtac tgtacttact | acaaaccaat accgaacact cttgcccaat tcaacgaatc aatttagagc tgcatggagt | tctataagca tggtgggtgc catttcagaa aaagcatgaa ataaaaaggc gatcaaggac | aaattcacaa acttttgggt cacaacctag ttttccctaa atcaatggaa actaaaatgg | 120 180 240 300 360 |

| <210> <211> <212> <213> | 6343 580 DNA Glycine max | × | | | | |
|-------------------------|-----------------------------------|------------|------------|------------|------------|-----|
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| tctcccccat | tttctataaa | tagggggaga | agtgaagtag | aaaagggttc | agccccttag | 60 |
| gcacttctct | ctctttcgaa | tttgcttagg | aaaattgttt | ccgtgaagaa | aatccaagcc | 120 |
| gaggcgcttc | cgtaacgctt | ccgagatgtt | tccgtaagca | aatccgtgaa | ggttttcgtc | 180 |
| cgttcttcac | cgttcttcat | ccgttcttcg | ttcttcaacg | ggtaagtttt | cgaatccgag | 240 |
| actttcaatt | catttcttat | ttttttaagc | tttcatcttt | atttcgttca | ttttcgattt | 300 |
| cttttctttc | gtctataacg | cgcttttact | gtttatttaa | gccgttttct | cacctaataa | 360 |
| atgataaaat | gaacttcaac | cgatcattgg | tgtcgtaatc | tcatttaatc | actcttaaaa | 420 |
| cgaaatctaa | ccgatcggtc | atgctataac | ctcggttaaa | ccaaaaaaag | taaaataatc | 480 |
| aaaatatctt | gaaaaataat | aataaaataa | tcaaaatatc | tttgaacaaa | ataaccaaaa | 540 |
| aaatcaatcg | gacgtttttc | tttgaaagtt | tccttgaatg | | | 580 |
| <210> <211> <212> <213> | 6344 445 DNA Glycine max | | | · | | |
| <400> | 6344 | | | | | |
| agcttttgaa | ggtggtatgc | tttggggaag | aaattaggtg | aaaatggctt | cacctctccc | 60 |
| cccttttaaa | tttttacatc | agacacactc | acccaggcga | gctaaatttt | tttttttt | 120 |
| tttacaaaat | tgggttattc | attgttatat | ttcttctaaa | aatcctataa | ttgcatataa | 180 |
| gcttaggaga | attcaggata | taattcaagg | aaacaaacaa | gcataaaaca | ggaaattaaa | 240 |
| gagcaaagtt | agagatacta | gactgcctca | taggagcact | tctttaacat | ctttagccgg | 300 |
| acgcaggttg | atgatcaatc | gatcatgggc | ctagcacctg | ttcgtaccta | ccccaaagat | 360 |
| tgaacaaaga | aagtggcatc | atgcaaatgt | gaaacaatac | tacacgatgc | atgcattacc | 420 |
| tttcacttac | ccctattggt | tatct | | | | 445 |
| <210> <211> | 6345 585 | • | | | | |

| <212> <213> | DNA Glycine max | x | | | | |
|----------------|-----------------------------------|-------------|------------|---|------------|------|
| <400> | 6345 | | | | | |
| | | gggt gaaagt | +++-~-++- | • • • • • • • • • • • • • • • • • • • | | 60: |
| | | gggtgaaact | | | | 60 |
| acctggagat | atgtcgcggg | ggtcaggaga | ccttggggac | gtcaagtggg | gtgctattgc | 120 |
| ccaaaaccaa | gcttgaccaa | tcccgaccca | acccgggcat | agtcggtcag | tgagaacctg | 180 |
| tgatgtacct | aagcaggcga | gctcctggca | gtcaacagat | aaaaggaaca | aacaccacaa | 240 |
| agcaaggagg | cttgtggtgg | ctggccagct | gtgaattttg | tgtgatatgt | ggattatggc | 300 |
| ctctggtaat | cgattaccaa | gggtgggtaa | tcgattacaa | ggcttaaaaa | tgaagacagg | 3,60 |
| aggctgagat | ggtctctggt | aatcgattac | caagggggtg | taatcgatta | ccaggcttga | 420 |
| aaacgaagtt | aggaaattaa | gggagccttt | ggtaatcgat | taccagcctg | tgtaatcgat | 480 |
| tacacagagg | gatgggtcac | tggtaatcga | ttaccaggta | tgtgtaatcg | attacacagt | 540 |
| gcatttttgc | atattccatg | ttctgacgct | gtgtaattcg | agttt | | 585 |
| <213> | 6346 452 DNA Glycine max | ς | | | | |
| <400> | 6346 | | | | | |
| agcttcagat | cactaaggcg | gattcctata | tttggtttta | tctgcacttc | ctccatatcc | 60 |
| ttttccacct | gaattgactc | attgactgcc | atgtgtgttt | tttttcaaag | gaatatcatc | 120 |
| atatacccaa | aaaatattaa | ctagttgcct | agaatagacc | tatatcacaa | aaaaaagcta | 180 |
| atctttcata | ataaaaggaa | ataaaacaac | aaacttgtac | ttgtacagag | aattttttt | 240 |
| ggaaatagca | tcctaaagta | gtgctattta | caataagact | caacagaaat | aaacctgttc | 300 |
| tacaaatctg | ttctaataat | aaaaaaataa | aaagtagtaa | gtagtaacat | aattattcct | 360 |
| tttatattta | aaacataaaa | aatgtaacta | tcctctaatt | ttttttaatc | aactctttcc | 420 |
| teggeetaca | taaaatttca | ttggatccct | tt | | | 452 |
| <211><212> | 6347 616 DNA Glycine max | | | | | |

| <223> <400> | unsure at 6347 | all n locat | ions | | | |
|-------------------------|-----------------------------------|--------------|------------|------------|-------------|-----|
| tttgtcctgt | tgacttcatg | ttgtttttt | ttattatcca | tacaatgcgc | aggccgaaaa | 60 |
| tatgttatct | gatatatatc | caggaggatc | tcccaaagtt | ggctccacgt | attgggatca | 120 |
| gatccttgaa | gtgggagtca | tctctgtgtc | agggcgtctt | ctgaagcgct | tacagaagtt. | 180 |
| cttggagcag | gtgaggactt | gaatattatt | taatggtgta | agaatcactt | tcaagaaaac | 240 |
| cagaatgtcc | cttacaattț | gcaagctata | gttccttatt | ctgattttaa | gcagtggcac | 300 |
| aagccaacta | tattactatg | ttagcttttg | ttatttccat | tatggtgatt | gtatatgcag | 360 |
| atacaaaaca | ctttctttgg | cctccgttaa | cagttttagt | gtttgaagtt | atgtgattgc | 420 |
| ctgacacggt | atcataggtt | ctctgagcga | ttaatttaga | gttcaatact | ctctcactga | 480 |
| gcaatgcaca | attagttccc | tctgtcatct | gcagtttatt | aacattttca | atttcctttt | 540 |
| tattgtgatt | ttcgccttac | attttctgga | gaattgcgcc | aaattccacc | tatacttnta | 600 |
| tgctcctatc | ctattg | | | | | 616 |
| <210> <211> <212> <213> | 6348 386 DNA Glycine max | κ | | | | |
| <400> | 6348 | | | | | |
| | | | | cacattccac | | 60 |
| | | | | gtgaactttc | | 120 |
| tcatatcttt | attetttetg | ataattgaag . | atcattcagc | tccctcagat | ccttttgaag | 180 |
| atcttttagg | tttttttcca | actcctgaaa | gttattaaga | aaagtagatt | ttatttttgg | 240 |
| caatcgtctc | atttttaaaa | caaagcttgg | actctttttc | cttgagaggt | acacaagctc | 300 |
| cacatgtctg | agtatactca | ttcagtgaaa | catttacttg | atcttgaaga | ttttctcaag | 360 |
| tttaaaagat | ctttggatag | ttttt | | | | 386 |
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| <400> | 6349 | | | | | |
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| ctggggatgg | tgggttcatg | tttgatttgt | gaaagcggga | gaattcgatt | gcgccattcg | 120 |
| ccgatctcct | cctagtacca | catatgacgc | gtgccccata | atccactatg | cttgaggtga | 180 |
| gaaagcgtgg | aggagttagt | cttactactt | ttgtttgttg | accatagagt | gagacttgga | 240 |
| gatatgtcgc | gggggtcaga | gacaccttgt | ggacgtcacg | tggggttcta | ttgccctcta | 300 |
| ccttatttga | ccac | | | | | 314 |
| <210><211><212><213> | 6350 401 DNA Glycine max | x | | | | |
| <400> | 6350 | ٠ | | | • | |
| agctttctta | agatagatct | agcgcgtcct | tttctcttag | agacctcccc | ccatgtggag | 60 |
| gttgtttcat | gttctccaac | tgtgcaaaat | cttaatgctc | ataatctgaa | tgctcaagat | 120 |
| tataatagct | ctagatcaag | atgttcaaaa | tgacacgcac | cagattgcac | taattctcca | 180 |
| cttatgctat | gctcctaatg | atccatatgt | ataaattgat | gcctacctaa | tctatgaaaa | 240 |
| ggcccatcta | tttcaggatc | gaatggttga | taacctaaag | aatagcccct | tcttcataca | 300 |
| ctacattcaa | cctgcacaca | aacttatgcc | ctgtcctgct | aataaaagtg | ttaggaatag | 360 |
| ctacagtttc | cctcaattga | catccaactg | acttgtaatt | t | | 401 |
| <210> <211> <212> <213> | 6351 352 DNA Glycine max | s. | | | | |
| <400> | 6351 | | | | | |
| tgggaagtcc | aatggatctc | gcatggatga | tcgattcact | atgcagacaa | gagaccccct | 60 |
| tatatgcgat | gaaacatacg | tgtctgcaga | gcgcaaacct | catggaaatt | gtgattacag | 120 |
| gggaattgct | actataataa | gctacatgtg | atgaattatg | tctctacttt | tacatgacta | 180 |
| tgattaagat | tttaatacat | gggaatacca | ctatgttgag | ttgttagacg | catcaaatgg | 240 |
| ctttattaca | casatacact | attattate | ~~~~ | | | 2.2.2 |

| ctgtgatgac | cagtecegae | c atgggctate | g acatagaato | , tgaatttgaa | ı ga | 352 |
|----------------------------------|-----------------------------------|--------------|--------------|--------------|------------|-----|
| <210> <211> <212> <213> | 6352 626 DNA Glycine ma | I x | | | | |
| <400> | 6352 | | | | | |
| agctggacga | gcttcaacat | atgacgtcac | cgttgacgca | tttattgggc | ctgatgcaaa | 60 |
| gccctgttgg | ttgaaaacta | cttgacctct | aactgtttta | agatgtttct | cacaaacggt | 120 |
| gctcgtccca | acaagctato | tatgcatgga | ttttatgcaa | gacttgtctg | ataaacctta | 180 |
| cctatcgtac | ggccttgcac | tggcctattc | ctaattcccc | gaccctatgc | acactgcata | 240 |
| ttgtttgcgc | tcacttcaga | caaatggtcc | aacaatgccc | ttacttgatg | actctatgca | 300 |
| tgtctactac | ttttgctact | ataacatctt | gatcctgacg | catgatgagg | atttatggat | 360 |
| catgggccta | ggatgagatg | gccctcgtgc | ctatttggtt | taccaacatg | gaatgaagcc | 420 |
| gcacagtaga | cgtgactgcg | ctaccactta | ccttggttta | tcttttcctt | gaattcggcg | 480 |
| ttgtattgac | cattatttca | aacaaatctt | ctcttgtcgt | tcgatgcata | ggatgataaa | 540 |
| tatgcctatg | cctgcatgct | catgatcaag | gcagtcaagt | gttacaaatt | taaccaaatg | 600 |
| tttattatgt | tcaattttac | ttaaac | | | | 626 |
| <210> <211> <212> <213> | 6353 293 DNA Glycine ma: | × | | | | |
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| tatctgctgc | tttagttacg | atgcactacg | gtggctagcc | ttagcgtcac | tcacatgcat | 60 |
| gtggtgatct | ttgacttact | acaagaacaa | tgtgatagtg | gacgcgatac | ttgggaagct | 120 |
| cccgccctct | agcatatgca | cattcatggg | cctgatgcgt | cttagagcag | cttctaacaa | 180 |
| cttgctattt | atagcacact | cttactgata | aaagcttctg | aatatagata | gatatatata | 240 |
| tagatatata | tgtattgaga | agaacaacct | gtgctaccat | aatggtgtga | aaa | 293 |
| <211> | 6354 480 DNA | | | | | |

| <213> | Glycine ma | x | | | | |
|--|---|---|---|--|--|--|
| <400> | 6354 | | | | | |
| agcttttttg | taatggatat | gattttcact | aacaaatatg | gttaaacatt | agactttgaa | 60 |
| tgtatcatcc | aacgagtgca | aaaaccaact | tatttaaaat | caaatgtgga | ctatcgtcca | 120 |
| atgctagtaa | aacagagttt | tcaaaaaggt | tttcaagtgc | agacttgtgc | aacaaagtgt | 180 |
| atcaaaatca | acacaaaaga | atactaatca | agtagcttta | gagagaagta | gaaacacttg | 240 |
| gatttatacc | aattcactca | aacaaagcta | tgtctagttt | tcctttgcaa | atcaataaag | 300 |
| ggttctacta | atcaaaactt | gattacaaca | agtctatgta | ccaaaagcga | gtatttttca | 360 |
| gcctctatgc | attggcgagt | attttccccc | aatactcagc | ttttttcacc | aaagtatatg | 420 |
| taccaaaagc | aactttttg | cccttcgggc | cttccatcac | tcggaaaatc | ttctcaattt | 480 |
| <210> <211> <212> <213> | 6355 663 DNA Glycine max | × | | | | |
| <223> | | | | | | |
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| <400> | 6355 agaagatgag | tggagggaga | gggagtgaag | aggcacgaaa caaagttaca | | 60 |
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| <400> tgaaggtagg caaatgaggt cacatgcttc tgagaagctt | agaagatgag ctgaactttg catttatagc ctttgagaag | tggagggaga aagtgtaatt ctaggtagct cttccttgag | gggagtgaag ctcaaatgat tccttgagaa aagctagagc | caaagttaca gcttccttga | acaagtgtta gaaacttcct acacccctca | 120 180 |
| <400> tgaaggtagg caaatgaggt cacatgcttc tgagaagctt aataactaag | agaagatgag ctgaactttg catttatagc ctttgagaag ctcgcctcct | tggagggaga aagtgtaatt ctaggtagct cttccttgag tgagaaaatt | gggagtgaag ctcaaatgat tccttgagaa aagctagagc cctagagaag | caaagttaca gcttccttga ttagctacaa | acaagtgtta gaaacttcct acacccctca gctacacaca | 120 180 240 |
| <400> tgaaggtagg caaatgaggt cacatgcttc tgagaagctt aataactaag cccctctaat | agaagatgag ctgaactttg catttatagc ctttgagaag ctcgcctcct agctaagctc | tggagggaga aagtgtaatt ctaggtagct cttccttgag tgagaaaatt acctccttga | gggagtgaag ctcaaatgat tccttgagaa aagctagagc cctagagaag gatgagaagc | caaagttaca gcttccttga ttagctacaa ctagagctta | acaagtgtta gaaacttcct acacccctca gctacacaca ctacacacac | 120 180 240 300 |
| <400> tgaaggtagg caaatgaggt cacatgcttc tgagaagctt aataactaag cccctctaat tttctataat | agaagatgag ctgaactttg catttatagc ctttgagaag ctcgcctcct agctaagctc agctaagtcg | tggagggaga aagtgtaatt ctaggtagct cttccttgag tgagaaaatt acctccttga tcatattccc | gggagtgaag ctcaaatgat tccttgagaa aagctagagc cctagagaag gatgagaagc acatggnttc | caaagttaca gcttccttga ttagctacaa ctagagctta tagagcttag | acaagtgtta gaaacttcct acacccctca gctacacaca ctacacacac attntcaaca | 120 180 240 300 360 |
| <400> tgaaggtagg caaatgaggt cacatgcttc tgagaagctt aataactaag cccctctaat tttctataat aatattca | agaagatgag ctgaactttg catttatagc ctttgagaag ctcgcctcct agctaagctc agctaagtcg agggaaatga | tggagggaga aagtgtaatt ctaggtagct cttccttgag tgagaaaatt acctccttga tcatattccc aacaccggaa | gggagtgaag ctcaaatgat tccttgagaa aagctagagc cctagagaag gatgagaagc acatggnttc agcataccgg | caaagttaca gcttccttga ttagctacaa ctagagctta tagagcttag ttcttctcca | acaagtgtta gaaacttcct acacccctca gctacacaca ctacacacac attntcaaca atttaaaatt | 120 180 240 300 360 420 |
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| <400> tgaaggtagg caaatgaggt cacatgcttc tgagaagctt aataactaag cccctctaat tttctataat aatattca aaaacagagt acgagtaagg | agaagatgag ctgaactttg catttatagc ctttgagaag ctcgcctcct agctaagctc agctaagtcg agggaaatga gatccgagta cattgttgga | tggagggaga aagtgtaatt ctaggtagct cttccttgag tgagaaaatt acctccttga tcatattccc aacaccggaa tcgaacttag acacacattg | gggagtgaag ctcaaatgat tccttgagaa aagctagagc cctagagaag gatgagaagc acatggnttc agcataccgg ggaacttgct acaattgatg | caaagttaca gcttccttga ttagctacaa ctagagctta tagagcttag ttcttctcca gtcatcaagt tattagacaa | acaagtgtta gaaacttcct acacccctca gctacacaca ctacacacac attntcaaca atttaaaatt agttttatta gaaataaact | 120 180 240 300 360 420 480 540 |

<210>

| <211> <212> <213> | 713 DNA Glycine max | ς | | | | |
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| atacatatat | atatatatat | atatatatat | atatatgttt | aggtagaaag | ataccttgga | 120 |
| tatgcatgta | tgtagcaaaa | aaaatttcac | aaaatatata | tatgtatgtt | taggtagcaa | 180 |
| gataccttgg | atatgcatgt | atatagcaaa | aatatctcac | aaaacatata | tacgtatgtt | 240 |
| taggtagcaa | gatacctggg | acacacatgt | atatagcaaa | atacctcaca | aaaatatacg | 300 |
| tatgtttatg | tagaaaaata | cctcatgaaa | aaaaagagag | cgagccagaa | aagaattata | 360 |
| agaaaaaaaa | atgaaagaga | aattattaaa | aatattaaaa | attattgggg | tgggtagcta | 420 |
| aaaaaaacat | ggttgtgaaa | gagataactc | cagtttttt | tgaaaaatgc | gcttgtcata | 480 |
| accagttttg | aaaaaaatgt | gtgtacacat | ttgaggggaa | atgctttaaa | aagtttttca | 540 |
| aacacccaaa | tagactgggt | gaatgcccaa | attatagaaa | acatttttgg | gaaaactagg | 600 |
| tgacttaaaa | agggaaatga | aatccgagcc | caatgggaca | ggaacataaa | aacttgtggt | 660 |
| tgagggtcca | agggtgcatg | catgaacatt | ttgcaaaaat | atcctaaaca | tat | 713 |
| <210> <211> <212> <213> | 6357 557 DNA Glycine max unsure at a | | ions | | | |
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| tcattagagg | gctttccttc | tgtgtccagc | atcttgggat | gttcccagcc | tttgatgaca | 120 |
| gctttccagg | ttctgctatc | cagtgatttg | aggaaggcca | ccatccttgc | tttccagtat | 180 |
| tcatagttgg | ttccatccag | aataggtggt | ctgttcactg | gtcctccttc | tttctccatg | 240 |
| ttcatcagaa | tttatctccc | tagatctcac | tcagtgattt | cgagtgccag | ctctgatacc | 300 |
| aattgaaatt | ctgatactgg | ggacagatgt | cgtacaggat | gtcacgacat | cacgcttcag | 360 |
| aacatgcaga | ttatagttga (| cagtgtggac | agtttaaaca | agaagataac | acaagagatt | 420 |

| ngttaaccca | gttcggtgca | accttaccta | catctggggg | ctaccaagco | agggaggaaa | 480 |
|----------------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| tccactaaaa | tagtgttagt | tcaaggtcta | acagccactg | tttacaacct | tctcacctaa | 540 |
| ccactacccg | tgcgatc | | | | | 557 |
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| gtgttgagtg | atcgatgttg | tgccctcttt | gcgaaacaca | aattgaaaat | gcttttaata | 60 |
| cgtttatcac | atgcaacacg | agtgaaggat | cctggaagaa | tctacatcta | aagaaaacta | 120 |
| tttttcaagc | ctgatattta | agctcttcca | ttatctaagt | gtaatgttga | tgcctttcgg | 180 |
| gattcattga | atgtgactgg | tatgggagct | tacacccgag | atgacaaggg | gagggtagct | 240 |
| gctgtgaaga | cagatttcgt | gaatccatgt | ttgcaggttc | caaaaggaga | agcatgagct | 300 |
| cttgcaagag | ctattcagtt | tgtccaatcg | ctgggtatca | ataatggatg | agtcttttta | 360 |
| cttaacaata | aacaagactt | aaagtaaatt | ttaatagcaa | ttttttactt | taaatagttg | 420 |
| agtctttta | ctatcatata | tatatatata | tatgtatata | tatatacata | tatctttata | 480 |
| tatatattat | ttctactaag | gtgtgggacc | tttttttctt | ataaaataat | atttaaaact | 540 |
| cagcctgcgc | ccaagttgtc | taaattctat | atttaaatat | tttcatttaa | ccctctaata | 600 |
| tgcccctaaa | ggaaattttt | aatttacacc | attgttttaa | agttcaaacg | agactgcaaa | 660 |
| cccttaattt | tttgttgagc | ggccatttta | ttttaccgag | gttacgtttc | attttaattt | 720 |
| ttcttggggc | gttaaaatat | ctatcg | | | | 746 |
| <210> <211> <212> <213> | 6359 611 DNA Glycine max | | | | | |
| <223> <400> | unsure at a 6359 | ll n locati | ons | | | |
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| ctagtctatt | aatagaagca | tgtgtaacac | ttattgtaac | tttgatgaat | gagagtettg | 120 |
| tgagacatac | ttcaaagctc | cacttototo | catattttat | taattaa | . | 100 |

| cectetetet | ttctctccct | ctttctttc | ctccattgaa | gcatccttcc | cagcttctta | 240 |
|----------------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| tccaaggctc | atcttggtgg | tgaagctcct | tcttccatgg | cttattccct | aatggatggt | 300 |
| gcctactctc | acctcttctc | ctttgtcttc | cgctgcatct | ccatggcgga | aaatcaccat | 360 |
| taaaggacct | cattgaagct | caaagatccc | gcctgcatag | aagctccacg | ggccagcttn | 420 |
| catcgagtgg | taatcacagc | acaagagctt | caagtaggtg | ctccttaaac | ctccattaat | 480 |
| attttgcttt | accttctctt | ccattgtgtg | tcttcattat | tttccatgta | tctcctcaaa | 540 |
| tgtcttgtgc | taaatgttgg | taacatgatt | ctttagagtt | tcactgcata | aacttgtata | 600 |
| taagttagat | a | | | | | 611 |
| <210> <211> <212> <213> | 6360 594 DNA Glycine max | ς | | | | |
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| aaactatcaa | cccacatgga | atattcccca | acccaacagt | tcagtgttcc | ctatgcacaa | 120 |
| actcatcact | ctgtattggt | gactcttccc | acaagacatc | accaaagcca | acctcattgc | 180 |
| tttatgcact | ttataccgaa | tacttcagat | gcaacaaccc | tcctatttgc | tcactgccca | 240 |
| ccttgttttc | ctatactaga | aatttccaat | aacacatcca | gcacatgtga | ttcctatttg | 300 |
| atgtatgaaa | tcaactttgt | ataagagaat | ccataacatt | ttgtgactac | ctctaagttt | 360 |
| tacttaattg | ctttgcttat | agtttttctc | gatatccctc | tacctctagt | ggctacatta | 420 |
| tcccccatct | gatctactct | tctttttagg | gcttctacca | gactttgcca | tacatgaccc | 480 |
| aaccacctaa | agagaaattt | taccatcttt | ttgcaatatg | aactacacag | actttacccc | 540 |
| taaatgcatc | cactcctaat | ctatcttgac | tagtatgtct | ataaacaatg | atta | 594 |
| | 6361 646 DNA Glycine max | | | | | |
| <400> | 6361 | | | | | |

tgtaggttga agaggtgaga tctaaatatg gttatggtga atgtgttttg agagatttat 60

| aacttaatac | aattatagag | agtaagcttg | aatatgagag | ctttacaact | taagataatt | 120 |
|--|--|---|--|--|--|--|
| acaaagagta | agaagtgccc | taagtgcaat | tctaacctga | gagaaattgc | ggtaagcgtg | 180 |
| aaaagttgtg | cttaatgcca | aaagtggact | ccatcttaac | gagacacgct | cgtcaagcga | 240 |
| gatctgcaga | ttataaatat | gtttttcagc | ctgaaaaata | caatttcacg | cctctctctc | 300 |
| tcaaaactct | gtccaaccac | cctagaaact | cctcctccac | cacccacgac | caccggtggc | 360 |
| caccacgagc | tgccattgtt | tgccgctgaa | ccaccacact | gagaggaaca | ttttaatcgg | 420 |
| agcggaatcc | tcataatcca | cctcaaggat | tcggtggaga | aaaatccctc | aatcctttct | 480 |
| tttgtagctt | ctttgaggta | atcttgactt | ctaagtcttt | ctcttaatta | gttggagttt | 540 |
| ctcttagtgt | ctcttgtgtg | gttggatatt | gaaatacgat | ggttttacac | ttcctttgaa | 600 |
| aacccttgaa | aatgagacat | tgtaaaaagt | aatcttttat | aaaatt | | 646 |
| <210> <211> <212> <213> | 6362 440 DNA Glycine max | ς | | | | |
| | | | | | | |
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| | | aagttaacaa | gaagcaataa | aggatcaact | gtgaaaatga | 60 |
| agctttaaga | ctattcacat | | | aggatcaact aatttatata | | 60 120 |
| agctttaaga attgcattcc | ctattcacat | tcttctccac | aattccttcg | | tgcttagatg | |
| agctttaaga attgcattcc catgcaagaa | ctattcacat catacctaga aggattcaag | tcttctccac gctaactgca | aattccttcg | aatttatata | tgcttagatg ggttgtttcg | 120 |
| agctttaaga attgcattcc catgcaagaa taaaagggta | ctattcacat catacctaga aggattcaag ctatggcggt | tcttctccac gctaactgca catttgcttg | aattccttcg aaccttttat caacagtggg | aatttatata tggtcttgat acaagatgca | tgcttagatg ggttgtttcg | 120 180 240 |
| agctttaaga attgcattcc catgcaagaa taaaagggta tttttgtgat | ctattcacat catacctaga aggattcaag ctatggcggt tgcatatgcg | tcttctccac gctaactgca catttgcttg gcagtaaata | aattccttcg aaccttttat caacagtggg ttgaagataa | aatttatata tggtcttgat acaagatgca | tgcttagatg ggttgtttcg aacaatgcct aagtggttcc | 120 180 240 |
| agctttaaga attgcattcc catgcaagaa taaaagggta tttttgtgat tcactttgtt | ctattcacat catacctaga aggattcaag ctatggcggt tgcatatgcg acctgaagac | tcttctccac gctaactgca catttgcttg gcagtaaata ataggagact | aattccttcg aaccttttat caacagtggg ttgaagataa acaagcaata | aatttatata tggtcttgat acaagatgca agataactgg | tgcttagatg ggttgtttcg aacaatgcct aagtggttcc ttcatgtcag | 120 180 240 300 |
| attgcattcc catgcaagaa taaaagggta tttttgtgat tcactttgtt | ctattcacat catacctaga aggattcaag ctatggcggt tgcatatgcg acctgaagac ggtgccatta | tcttctccac gctaactgca catttgcttg gcagtaaata ataggagact | aattccttcg aaccttttat caacagtggg ttgaagataa acaagcaata | aatttatata tggtcttgat acaagatgca agataactgg tggctggaat | tgcttagatg ggttgtttcg aacaatgcct aagtggttcc ttcatgtcag | 120 180 240 300 360 |
| agctttaaga attgcattcc catgcaagaa taaaagggta tttttgtgat tcactttgtt acatccaaaa | ctattcacat catacctaga aggattcaag ctatggcggt tgcatatgcg acctgaagac ggtgccatta | tcttctccac gctaactgca catttgcttg gcagtaaata ataggagact aatataaaaa | aattccttcg aaccttttat caacagtggg ttgaagataa acaagcaata | aatttatata tggtcttgat acaagatgca agataactgg tggctggaat | tgcttagatg ggttgtttcg aacaatgcct aagtggttcc ttcatgtcag | 120 180 240 300 360 420 |

tagaacaata tacttggcct tcatttaact gtctttgggc ttggcggcca cgatcaacaa

| agtactttcg | acacctacta | tatgttgatt | tgaccaacgc | tgttatcgga | atgttgcgac | 120 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| aatccttcta | aaccttattt | ttacattctg | agaggttcat | tgtcatgtgg | ccataccgac | 180 |
| gtccttctct | atcataagcc | atcgtccatt | tctcctttga | aatgcgatca | atccatgttg | 240 |
| ctatggctgg | acttagttga | cggaatttt | ctaaattttg | ataaaaaatg | tgtttgcaag | 300 |
| gagtgtagcc | tgcatgaaat | tagttagcaa | caacaatttt | aactataaat | caaacttaaa | 360 |
| ttaatgtgac | catgataaat | gaaatgttac | ccaatttctt | caacatttct | ttttgtttgg | 420 |
| cattattgaa | tttgcgattg | aagttgcttg | ctatgtgtcg | cacgcagtaa | acatgataac | 480 |
| catggggagg | ttgtcaacca | agtgtttcgt | tggccacaac | agactttata | ctcgcgtgac | 540 |
| gatcagatat | gagacaaata | ccatgtttat | ttgtgatgtg | ttcacgccag | tgtgccaaaa | 600 |
| accatgacca | cgcagtttac | gtct | | | | 624 |
| <210> <211> <212> <213> | 6364 553 DNA Glycine max | ς | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| agctttaagg | ataagtcttc | ctgttgctcc | ctctatctct | aacactttaa | tgttgcaaat | 60 |
| tgtatggaaa | catcgagcgc | aatacagttc | ccaccccaaa | ccctgaacca | ataccttatc | 120 |
| aatcacaata | ttatctttag | tcccattatt | cacaattatc | ccatgcaacc | tatgacactt | 180 |
| tagctttatc | ccaacaaaaa | aaatatttga | accaaaaaaa | tgttttacct | aacttctttt | 240 |
| tgcatcattt | tccacctatt | tttttgagtc | ccatcttggg | gatcatactc | acacgtactt | 300 |
| cagtacccct | acagtggagc | cttcctcatc | aatccgacca | aacgagcttc | agttcacagc | 360 |
| aaatccaggc | ttacctaacg | aagaacacgg | tccctttagt | gaggatgaag | acaaatttat | 420 |
| tcacaattaa | cctangaggg | agatgacgag | gaagaagcct | ggtctgtttc | accaatcaca | 480 |
| accatattgc | catgctacat | accaccccat | atccaaaaat | ttgaaaaatt | ctattttcaa | 540 |
| gattttgaac | atg | | | | | 553 |
| <210> <211> <212> | 6365 709 DNA | | | | | |

| <213> | Glycine ma | x | | | | |
|---------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| <223> <400> | unsure at 6365 | all n locat | ions | | | |
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| cctcggaagc | aaaaaaggaa | tagaagggaa | atttccaatc | aaagaaaaag | agaaggaaaa | 120 |
| tttccaatga | aagcaaaaaa | agaaaggaag | ggaaatttcc | aatcaaagaa | aaaaagaagg | 180 |
| aaaattcccc | aatcaaagag | tgggagaaag | caaaaagaaa | agaaaggaaa | ttcccaatca | 240 |
| aagaatggga | gaaagtaaaa | aaggaagaag | aagaaggaaa | gaaagccctg | atcggggatc | 300 |
| gaaggaaaaa | acagaagaaa | tatgcagaga | ggtctttgga | ccggacaata | tctgaacaat | 360 |
| acagaattgt | caccaaatga | acaaaaaaga | aggaaaggaa | accacgacct | aaaatggtct | 420 |
| tctcccttta | attaccaacc | aaaatcccgt | gcgctagcga | ccctttttt | ttctcgcccc | 480 |
| gcactagaca | aaaaaaacg | gaaaaaagaa | aaaaagccag | aaaaatcaaa | agccaaaaac | 540 |
| acacaaaagc | cgaaaaaccc | accaaaagaa | cccattccca | agggaagccc | tattgatcca | 600 |
| tgatcacgca | tgtaatnttt | gatttgatag | gaagtaattt | gcanagtcaa | gtcatgacat | 660 |
| atctatggnt | cngaattang | atgaaacact | tacctgtgcg | agattgata | | 709 |
| <210><211><211><212><213> | 6366 409 DNA Glycine max | ς. | | | | |
| <400> | 6366 | | | | | |
| agcttgcctt | gccccttgat | atatttgagg | gactcatggt | cactatgaat | gacaaattcc | 60 |
| ttgggataaa | ggtagtgatg | gcatgttttc | aaagcccgta | ctaacgcata | caactcctta | 120 |
| tcataaattg | aatagttaaa | ggtaggacca | cttaactttt | cactaaaata | agcaattgga | 180 |
| tggccttctt | gcatcaacac | agccccaatc | ccaacattag | aagcatcaca | ctcaatttca | 240 |
| aaagattttt | gaaagtttgg | caacgcaagt | atgggggcat | tagttagctt | ttgcttaaaa | 300 |
| acattgaaag | cttcttcttg | tttctctccc | catttgaaac | caacattttt | cttgagcact | 360 |
| tcattgagag | gtgctgccca | tgtgctaaaa | tccctctatt | aaaacttgc | | 409 |
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| <212> <213> | DNA Glycine ma | x | | | | |
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| actgctcttc | cttcccgcga | tgcttctttt | catgtccgcc | tgagtgggct | tatagcctaa | 120 |
| accatacttc | ccacgatttc | cttgggcatt | tatcaggcta | gttatgccgc | cgttgtcttt | 180 |
| gcctaaaccc | attccgggtt | cataaccgtt | ccccaacata | actcgggcca | tcattactgc | 240 |
| tgcatcggac | agacaaggct | gcccagagaa | ggagtccacg | gaggaaatgc | tgaccacctc | 300 |
| aaaagactgg | aaagtggttt | ctaacgattc | ttttgcggct | tccacataag | gcatagagga | 360 |
| tgggcagctt | accaagatgt | cttcctcgac | tgacacgatg | accaagtgcc | cctccactac | 420 |
| gaatttcaac | ttttggtgaa | gtgtagaggg | cacaactccc | attgagtgga | tccacgggcg | 480 |
| ccccaacaga | cagctgtaag | gggggttcat | atccattatt | tggaaggtga | ctngacaggt | 540 |
| gtgagggtct | anttgtactg | ggagatcgat | ctctcaccta | acctctncgc | gagtgctgtc | 600 |
| gaatgcacga | accaccatct | gactaagctt | taagtgggaa | gcattgaatg | gtaatttctc | 660 |
| caagtgctct | tcggcatcac | gttta | | | | 685 |
| <210> <211> <212> <213> | 6368 441 DNA Glycine max | ς | | | · | |
| <400> | 6368 | | | | | |
| agcttcttga | agcgtaagaa | acaaattcac | ttttatggga | tgttttccaa | acatataatt | 60 |
| ttaaaggaaa | aaatatgttt | actccgtttg | caaaattctt | gattttagat | gctggctcta | 120 |
| tattttacca | ttgaacattt | tgatcccgaa | caaaataagt | attattagtc | cattgagaca | 180 |
| atactgtaca | aattagatta | accgcatgtt | tgtttttcag | tttcaaaccg | atgtttggag | 240 |
| taaaatgaat | tttacaaaag | catttaaatc | cttcctttta | caaaactaat | tttgcggaac | 300 |
| attacattta | ttttgaaaat | tgggcactac | atttttaact | aaaaatcaaa | catgcactct | 360 |
| aaagactttc | ttatgagaaa | tggtacactt | tgagcaacag | tgcttcatat | ttctatgata | 420 |
| attataaact | acaattttta | С | | | | 441 |

<210>

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|--|---|--|---|--|---|---------------------------------|
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| ttttgagaga | ttaaatttac | cttatagaga | gtattttgtg | aatttgactg | cataacaaat | 60 |
| taaaagtaaa | acaataaata | ttttaatgat | atgagacact | taaagaatta | aaattaatca | 120 |
| aaatatttaa | caagaataaa | agtgtatttt | attaatgtta | ggagtaattt | tacaaaaatg | 180 |
| cgttaatttt | tttatcttaa | taaattagtt | aattgggtct | taaaaattca | gcaagagtaa | 240 |
| aaataataat | aattnatact | tcttccttct | ctttttctat | ttataagaca | tttcttaaaa | 300 |
| agactatttg | tacttttata | taatactttt | ttcaaaaaaa | attattaatt | attttttaac | 360 |
| ccanatatat | ttattcattt | tctcctgaac | gccatanagt | aactaaatac | attcttttt | 420 |
| cttctctcgt | aaaaaccaca | caacatgact | gaaacatatt | aattccttac | gcaaaaatta | 480 |
| agatttgctc | tgcattatat | atttgagtgt | agattttagt | gaacatatcc | aattttggga | 540 |
| cgaacacatc | atacgtcaag | aattataaaa | aaaataatgt | attt | | 584 |
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| agcttgagct | taattcaacc | | | | | |
| | oggordaacc | ccgtaatcca | aggaatggca | attctgatcg | ccaatacttc | 60 |
| aacaacatct | | | | attctgatcg agcttatgca | | 60 120 |
| | catagggatg | aatgactcgg | gcatacttta | | tggaaaatgt | |
| aattatgaaa | catagggatg ttgagatgcc | aatgactcgg cgaagaaaca | gcatacttta ccatttccta | agcttatgca | tggaaaatgt cattaggtac | 120 |
| aattatgaaa catgttcaat | catagggatg ttgagatgcc tattttgttt | aatgactcgg cgaagaaaca ttaagtgaaa | gcatacttta ccatttccta tgggtttatg | agcttatgca gttaaccatg | tggaaaatgt cattaggtac ggttggctca | 120 180 |
| aattatgaaa catgttcaat tggtgcctaa | catagggatg ttgagatgcc tattttgttt cacatgaaac | aatgactcgg cgaagaaaca ttaagtgaaa taagaatgta | gcatacttta ccatttccta tgggtttatg gtgtgaagtt | agcttatgca gttaaccatg atcccaacat | tggaaaatgt cattaggtac ggttggctca . cctttttttg | 120 180 240 |
| aattatgaaa catgttcaat tggtgcctaa tttttgtttt | catagggatg ttgagatgcc tattttgttt cacatgaaac gtagaggaaa | aatgactcgg cgaagaaaca ttaagtgaaa taagaatgta acgcaaggat | gcatacttta ccatttccta tgggtttatg gtgtgaagtt gagcaaacat | agcttatgca gttaaccatg atcccaacat tcacgcttcc | tggaaaatgt cattaggtac ggttggctca ccttttttg ggtatgcaat | 120 180 240 300 |
| aattatgaaa catgttcaat tggtgcctaa tttttgtttt | catagggatg ttgagatgcc tattttgttt cacatgaaac gtagaggaaa aaaaagtttg | aatgactcgg cgaagaaaca ttaagtgaaa taagaatgta acgcaaggat ttgaacgcat | gcatacttta ccatttccta tgggtttatg gtgtgaagtt gagcaaacat atgcatgata | agcttatgca gttaaccatg atcccaacat tcacgcttcc gaaaacaaat | tggaaaatgt cattaggtac ggttggctca . cctttttttg ggtatgcaat tcatgcaaaa | 120 180 240 300 360 |

| <210> <211> <212> <213> | 6371 586 DNA Glycine ma | ıx | | | | |
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| agagtagagg | cagaaaactc | tgcccaaaac | acattcaaat | accacagett | tccttattga | 120 |
| tataccccag | taacattctc | ttcgttccga | tttgttaacc | gttggatctc | cttgaaagtt | 180 |
| tttgtggaga | ttcctagtac | ataaataaac | attttgaccg | ttgggatctg | ctagaaaatg | 240 |
| tctggaaccc | gatatgtact | actcttccaa | tgactagcaa | tgcacaagca | ttattccgca | 300 |
| catttggtca | agttggttgc | acaatttgac | agcattttgc | tgcacaattt | ggcagatttc | 360 |
| gaaatccaac | ttgcccacat | ccagtgttgc | tcaaattgga | tcctacaagt | cctaaatcat | 420 |
| gtatgaatca | tatttgaacc | aaaaacaagc | ttcagatcaa | ggtaaatcaa | aatctatgta | 480 |
| tccaaaaccc | atcaatttag | tggattttaa | agtttgaaaa | gtgaaaatga | gacttgcgta | 540 |
| attttagggt | aaactctcat | ctcaatcaag | tctataacat | ttgatt | | 586 |
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| taaaaagtta | ttgttgtttg | aatatgctca | catcttcagt | attcaatttc | gagcgtctca | 120 |
| atatattaag | ggacttaatc | ggacatccga | gttaaaagtt | attgtcgttt | gcatttgcta | 180 |
| cgagcttccg | ttttcaatta | cgagcgtctc | gatatattac | gggactcaat | gcaacctccg | 240 |
| acttcaaagt | tattgtcatt | tgaatttgct | acgggctttc | gttttaaatt | tctagtgtct | 300 |
| tgatatatta | cgggacttaa | tcgaacattc | tagttaaaag | ttattgtcgt | cagcatttgc | 360 |
| tcagagcttt | cgtttcaaag | acgagtgttt | cgatatgtta | cgggactcat | ccgaattaaa | 420 |
| aagtattggc | gtttgaattt | gctacgagct | tttgtattca | acttaaagcg | tcttgattat | 480 |
| gttacgggac | tcaatcgaac | atccgagtaa | aaggtatatt | gggttggatt | tgctacaagc | 540 |

| ttccattttc | aa | | | | | 552 |
|---------------------------|-----------------------------------|------------|------------|------------|------------|-----|
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| <400> | 6373 | | • | | | |
| tcattgccta | acaagccaac | ttacaacagc | aagccccaag | agactcagca | taaggatgca | 60 |
| cagaccaaag | ttgcgtatgt | aaaaaaattg | tatgaccaag | tgaaggtgca | aattgcaaag | 120 |
| aagaatgaaa | gctatgccaa | gcaagcccaa | aagaaaagga | aggaagtggt | acttgaaccc | 180 |
| ggtgatgatc | ttggacattt | gaggacaaat | gttttccaag | aaggagggaa | tgatgagaat | 240 |
| catgaaacag | gccaaataca | gtctaaaggc | ccaagtggag | aaggacgaag | gcccaagtgg | 300 |
| agaaggacaa | agcccccgag | tggagaagga | tgaaggccca | agtggagaag | gatgaaggcc | 360 |
| cagaggcaga | gacactatca | agactattaa | ttgatgctga | aggccaagat | taatttgaag | 420 |
| gcccataata | aatatgttct | atttagttat | aattttatt | tattgtaatt | ctggcccata | 480 |
| ctggttagaa | ggcccatgtc | tatatttatc | tctttgttta | gctacactat | aagtatgggt | 540 |
| ttttgttatg | aataaaaaa | | | | | 559 |
| <210> <211> <212> <213> | 6374 481 DNA Glycine max | K | | | | |
| <400> | 6374 | | • | | | |
| | | | | ggtttggaac | | 60 |
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| gtaactttct | tttctcgcat | atattcaaat | ttgtcccatt | agaactatga | tcgcagactc | 180 |
| tttaactgtt | caatcatcgt · | gaaatttgaa | caccaggttt | ggaacttatt | tcctcatatt | 240 |
| ctcatcgttg | gaatttgtga | aataatatct | aggagagata | aatgtcccta | gcacaaagac | 300 |
| attgaaatag | aggcttcaat | cccttctcct | tctctctaac | gcttggaaac | cttagcagag | 360 |
| caaccagaga | aaaagcatga | ggaatcttat | gaattgctag | agactctcca | tattgtgaga | 420 |
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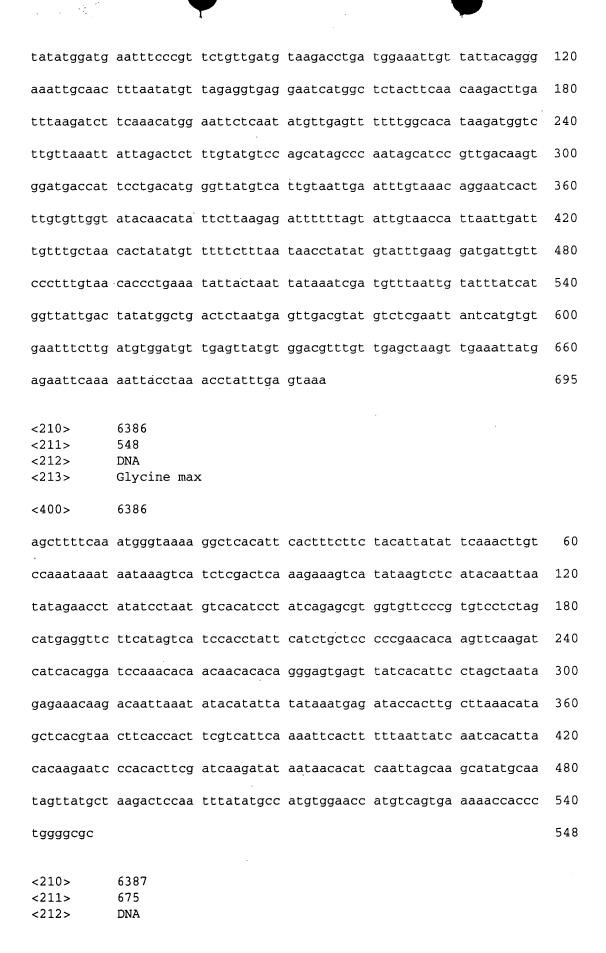
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|-------------------------|-----------------------------------|--------------|------------|-------------|------------|-----|
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| aagaatctca | cattggttaa | taaggtttgg | cctcaaaagc | ttgattttaa | aatgattata | 120 |
| taaagcttta | aaagatgttt | taccagcaca | aaaataagtt | tttttgcact | ggtaatcgat | 180 |
| taccaagtat | tgtaatcggt | taccagagac | aaattacata | aaaatatttc | tagaaggatt | 240 |
| ttgaaatttg | aatttcaaat | gttgtaatcg | attaccactt | gtctgtaatt. | gattatcagt | 300 |
| gacaaaactt | cataagttaa | ctttgaaaag | tcatgacctt | caaaacataa | ctgtgtaatc | 360 |
| gattatcaag | acattgtaat | cgattaccag | tgagagaatt | tttgtaaaat | attctgaaaa | 420 |
| gtcacatctc | ttcaaaagtt | tttgaaaagc | caccaaggac | atataaatat | gtgacttgtc | 480 |
| tatgaaaata | tntagagttt | tctgatgcaa | tcctaccccc | acaagggcat | tagatagaag | 540 |
| actccaagta | gatcgggcta | gagatgcaag | agaagcccta | tggttctcat | gagccttang | 600 |
| gtagaattca | agcccatggg | ctaagtatga | ctccacttta | | | 640 |
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| <400> | 6376 | | | | | |
| agcttgtggc | tgaattatta | cggactaact | aataaagttt | ataatttata | aggctttgga | 60 |
| tttgctatta | atgttggagg | tcttatatat | gcttcagcca | ccttctctct | ttcctcgctc | 120 |
| aaactattgt | aaaccaaaaa | ctccaccttc | tttcccaact | tcatgatcat | gtggcagttt | 180 |
| atattataac | aatgttttag | taacataatg | atactatttt | tagaataatc | acacaggaaa | 240 |
| ctaagctaaa | ttttgtccca | gagtgatttg | tttctcgggg | atttgaaaat | cactatcatt | 300 |
| ttatgtgtgt | gtctgtgctg | ctatacgtta | ttcatctgct | actattgggt | tggatctgtt | 360 |

| gaataaaaaa | aaatatatct | ggtaaaagtt | tgaaatctct | gttggaacag | aagtattttc | 420 |
|-------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| aaagaaaaat | acctattgaa | aaa | | | | 443 |
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| tgaagtgtcc | agttgtgatt | tttgttttcc | agttataatt | ataaatttga | ctttattttc | 60 |
| taactatcta | aattcttatt | ttatattatc | agatagtctt | tttggggata | gacaacatcc | 120 |
| atgcgatgag | agagagcttt | gttcggctcc | gagaatacat | ggacactcat | ggaagaacgt | 180 |
| catcagatgg | aatgtcctct | tttttggtta | gtccgtgaat | gttaaaacaa | aatgtaatta | 240 |
| tcatttttca | ggtagtgtaa | atttatttgg | ttcctatata | gacctgcaca | atatttatgt | 300 |
| tttagtcctt | acaccttaaa | attaaaaact | acttgtttta | gtcccaatac | atacactttt | 360 |
| taagtcgctt | aatccctata | gcttctgcgt | gacagggatt | aaaacgggtt | aaaaaatgta | 420 |
| tgtgtaggga | ctacaacgag | tagcttctag | gtgtaggaac | taaaacatac | atatggtgca | 480 |
| taggtataag | gacccaatga | gtaattaaat | catttatttt | taatagtata | tatttgatat | 540 |
| ttgaagagtg | atactactat | tagctgtata | atgacacttg | tagattagat | atttaatctt | 600 |
| tcttcatgat | gcttaatata | tatcttaata | ttatttaata | ctttttct | | 649 |
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| gttggatcaa | atggagaata | gagatcataa | tgaagaagaa | aggaggagaa | gagggaatga | 120 |
| tagtgttcct | aaacaaaacc | gaattgatgg | tattaaactc | aacattcctc | catttaaagg | 180 |
| aaagaatgat | ccggaagcct | acgttgagtg | ggagatgaaa | atagagcatg | ttttctcatg | 240 |
| caacaactat | gaggaggacc | agaaggtgaa | gcttgccgcc | acggagtttt | ccgactatgc | 300 |
| tcttgtgtgg | tggaacaagc | ttccaaagga | gagagccaga | aatgaagagc | caatggttga | 360 |

| ta | | | | | | 362 |
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| atgtccccga | atcggacatc | tgtgtgaaaa | gttatgacca | ttcgattttc | tcgagagctt | 120 |
| ccgttgttca | atttcgagcg | tctcgatata | ttatgacccc | gaatcggaca | tctgtgtgaa | 180 |
| aacgtatgac | cattcgattt | tctcgagagc | ttccgttgtt | caatttcgag | cgtctagatg | 240 |
| agttatgtcc | ccgaatcgga | cattcgagtg | aaaacttatg | accattcgaa | tttctcgaga | 300 |
| gcttccgttg | ttcaatttcg | agcgtctcga | tatattatgt | ccccgaatcg | ggcatccgag | 360 |
| tgaaaagtta | tgaccatgcg | attttctcga | gagcttccgc | tgttcaattt | cgagcgtctc | 420 |
| gatatattat | gtccccgaat | cggacattcg | tgtgaaaact | tatgaccatt | cggatttctc | 480 |
| gagagctctt | cttgttcaat | atcgagcgtg | tagatgagtt | atgtcctcga | atcggacatc | 540 |
| tgtgtgaaaa | gttatgacct | tctattttat | cgagagcttc | cgc | | 583 |
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| ccaaataaat | aataaagtca | tctcgactca | aagaaagtca | tataagtctc | atacaattaa | 120 |
| tatagaacct | atatcctaat | gtcacatcct | atcagagcgt | ggtgttcccg | tgtcctctag | 180 |
| catgaggttc | ttcatagtca | tccacctatt | catctgctcc | cccgaacaca | agttcaagat | 240 |
| catcacagga | tccaaacaca | acaacacaca | gggagtgagt | tatcacattc | ctagctaata | 300 |
| gagaaacaag | acaattaaat | atacatatta | tataaatgag | ataccacttg | cttaaacata | 360 |
| actcacgtaa | cttcaccact | tcgtcattca | aaattcactt | tttaatt | | 407 |
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| gtatatttct | taatactcat | aaaattctgg | ctcaagtttc | aattctcact | ttcacggagg | 120 |
| taagatccta | aattccaaat | caatttatgg | attatttgat | tttaattgaa | tcattgtgct | 180 |
| tatacaaaca | cccactcata | ttatgggtta | ataatttgat | tcatttttac | gggtgttgta | 240 |
| agtagattat | ggatgcaagg | aaggtgttct | atgaaatgcc | tgaaagaact | attgtttctt | 300 |
| agaactcggt | tatgactgct | tgtgttgaga | gtctttcatt | gngtgatggg | attgagtatt | 360 |
| tttttaggat | gtggggttgt | gcgtttgagc | ctaatgagac | ttccatggtt | gtgttgttgc | 420 |
| tctctacttg | tgttcttcaa | gctccatcca | tttctatttc | ttttttatta | attactaata | 480 |
| atactatata | tgctattgta | attgtattaa | taatgagtca | ttaataatac | tatatantgt | 540 |
| atggctacta | tatatggcta | ttactngtag | ttgaattcaa | tgacttattt | tctgatctcc | 600 |
| gatgc | | | | | | 605 |
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| cagtgcttat | ttttccaccc | acatactaca | gatactgcag | aatttctgcc | ttaaataagc | 120 |
| tgcagtgctt | gtacataact | tcaattaatt | tgaatctgct | ctgcaaatgc | tgcagaattt | 180 |
| ctgccttaac | caaattagga | ttttccaccc | agataccatc | aatcagcatc | ccccacaagt | 240 |
| gaagaacaaa | tgggatgcaa | actcaggctt | gttgtggcag | aaagggcata | agtcactgtc | 300 |
| agtttgaatt | tgcctcttcg | ctaggttatc | cttagtagga | agtctatccc | ataacaacct | 360 |
| ccaagcaaag | gacaaggcta | tcggggggaa | tttaatatcc | cagagttgct | ggaatgccaa | 420 |
| gtactgaac | | | | | | 429 |

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|-------------------------|-----------------------------------|---------------|------------|------------|------------|-----|
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| ctgtcactac | attctgcgtg | gacctaatct | tcatacgact | acactatgtc | acatcaatac | 120 |
| tgaacttgaa | aattcactga | atcttttgga | ctgactcact | tagtgttttg | ctaatacatc | 180 |
| ataattctat | tccaaaagtg | aaatatttaa | caaaggctaa | caattatata | cttacgtaat | 240 |
| tattatgcaa | tataatatac | gtaatggcta | acaattatat | ctaagatagt | actatagaaa | 300 |
| cgtcactcta | ttgaacgaag | tgtctactgt | gtact | | | 335 |
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| gttgtgtcat | gttctcagac | tgtgcaaaat | cagaatgctc | agaatcagaa | tgctcaaaat | 120 |
| tataatgctc | aagatcagga | tgttcaaaat | gaccaataac | agaatgcaca | aattcaccag | 180 |
| ttatggaatg | ctcagaatga | tcaaaaggta | taaaatgatg | cctaactaat | ctatgaaatg | 240 |
| tcctatctat | ctcaggatca | aagggtttga | aatcagatgg | aatgcctcta | gtcatacact | 300 |
| acattcagca | tgcacacaac | tagttgcctt | gtcatgtaaa | taaaggtgta | ggtttgagct | 360 |
| acagctaccc | tcaaatgata | tccaaatgac | ttgaaatttt | gtgagcċacc | ttataaaatg | 420 |
| atgagaagat | agcccaaaaa | atttcagaca | aaaatcaaag | tctaactatg | aaagctaaa | 479 |
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| <400> | unsure at a 6385 | iii ii iocati | LOHS | | | |
| tgggaactcc | aatgtagctc | gcaaagatgt | tagtaacaaa | aagcagacaa | aaaagtccct | 60 |



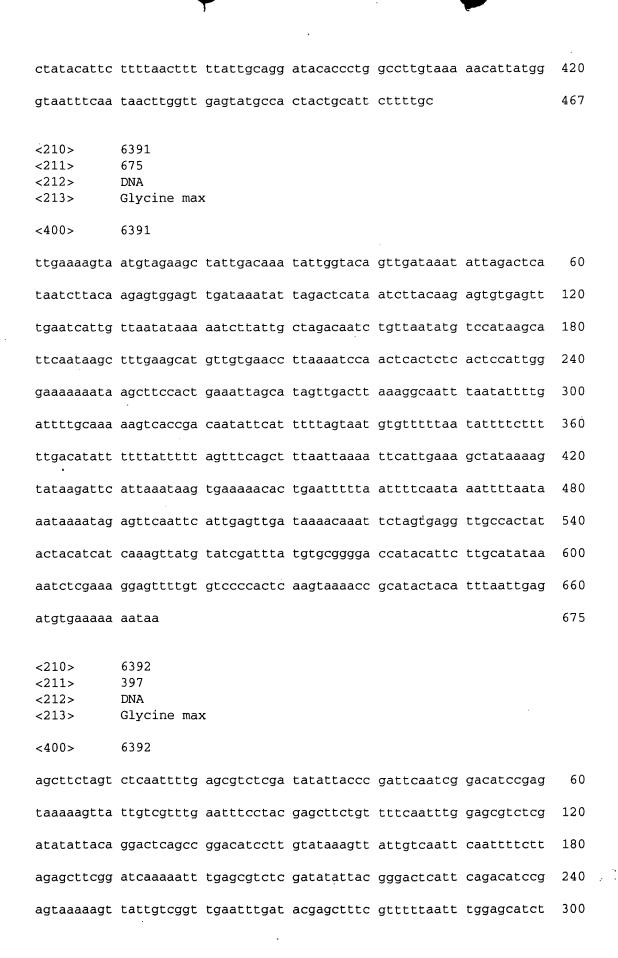


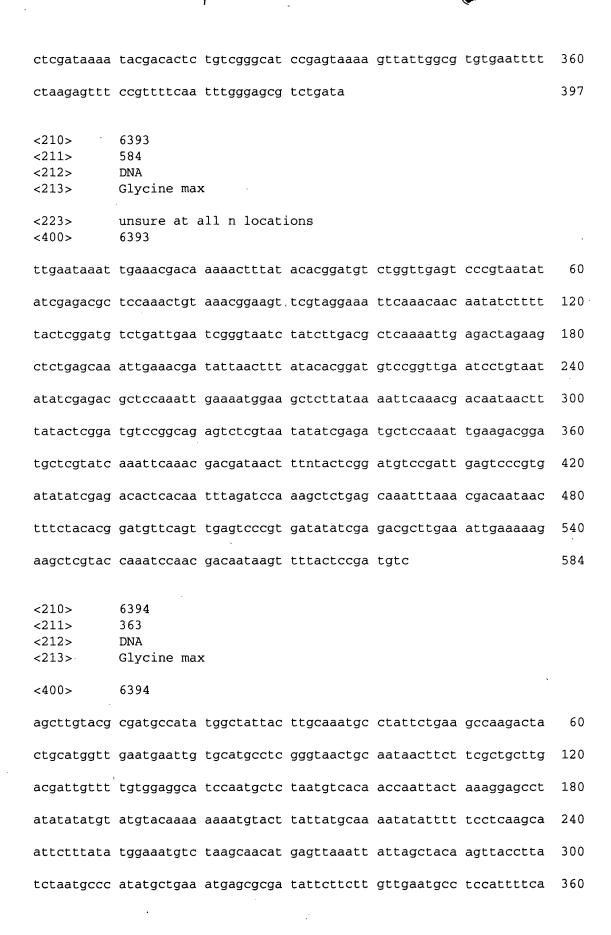
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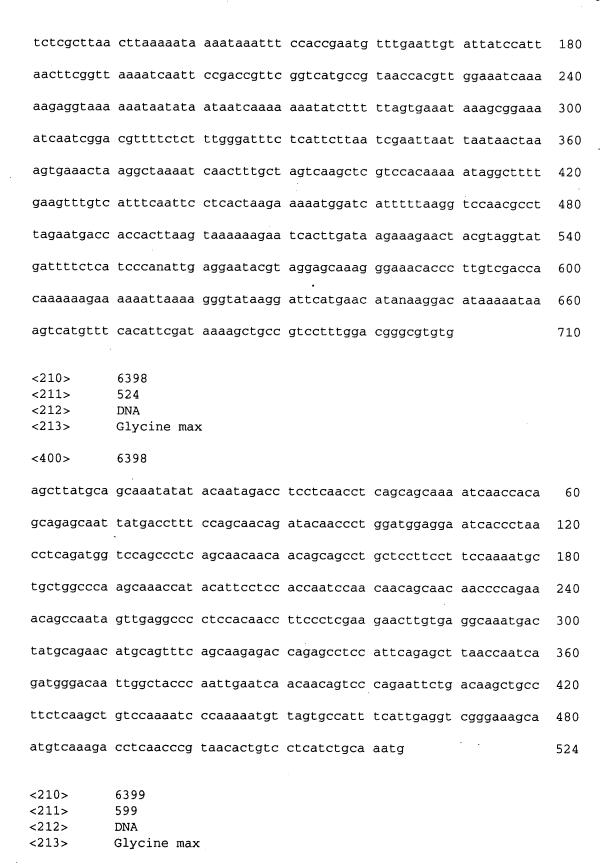
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| aaataaacta | tgaaagtaag | caagaaatta | aagtgaaaga | aatgtaaact | aggcggatcc | 120 |
| taagagtgtt | tggatgacct | catttaaggt | ttccaacaaa | atactcacta | .tcctaaagaa | 180 |
| aaattgccta | aaagtattac | acacaaatgg | aagtagggtg | acctattgga | ggctcccaac | 240 |
| ttacttccaa | tgaaaggcct | ttttgttata | aaatttgaaa | gcaatgaagg | taagtaaatt | 300 |
| ctcaattaaa | aaaattacaa | aaaggttctc | aatttttggt | gattgttctc | tctttggtga | 360 |
| ttcactcaat | ttggagtgct | tcttagtcca | atagctctta | aggttgtttt | ccccttgctt | 420 |
| cttgactcaa | attcttcaag | ggatgacacc | aatcctcctt | tccaattccc | tatatggcaa | 480 |
| ctcacaaaca | aggaaacaaa | gagacaagca | ataaccaaag | acccaaaaaa | tgaaatgaaa | 540 |
| gctaaaccaa | tagagtttta | acaagacaaa | ttttcaggaa | tttttcaaca | attaaagcac | 600 |
| ataaaagaaa | gctaggactc | anagagaaac | ttagaatgac | tctagagtag | agtanaanaa | 660 |
| acccaaatta | aaaagact <u>c</u> a | ngaaacctcc | tagttttgga | acttgtttt | cacactaatt | 720 |
| tt | | | | | | 722 |
| <210> <211> <212> <213> | 6390 467 DNA Glycine max | k | | | | |
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| agcttttaat | atgtgcttac | gagtgaactg | gtctatactt | atgttattca | ctcaacagtt | 60 |
| gtgtcttgat | tcaccaattg | tcattaacaa | gttcccttta | ggttgaacat | cttgacttca | 120 |
| tttgactttt | acaaatcttt | tataaaggct | tgctatatat | gccggttatt | ctctgatata | 180 |
| ccactggaaa | atgtaaaggg | ttttcctcat | ätaattgttt | catctaaatt | tctcac <u>g</u> aag | 240 |
| aagattggga | agtggttgct | caactgggtg | gtctttcttt | aggcgtattg | attctggtaa | 300 |
| aatacataaa | attttctgga | tggctttatt | acttgttacc | aaaacacctt | tttgttggaa | 360 |





| act | | | | | | 363 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
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| ccccaggatt | gatactctgt | gctaaatgat | tgctgactga | gaagccttaa | gatgctaaca | 120 |
| acccggtgcc | ctgctgcaga | gtgagcttcg | attgtcttca | tacatgcata | gacattgata | 180 |
| atataccagt | actattatgg | caagcgcctt | gctctgagtc | ctaaacccta | ctcagtgaca | 240 |
| cagctccgta | cctactgcat | ctcctatcta | ctgcttactg | aatagactgg | tgctgttt | 298 |
| <210> <211> <212> <213> | 6396 414 DNA Glycine max | ĸ | | | | |
| <400> | 6396 | | | | | |
| agcttgaaag | tgtgtaacca | accattttct | cattgtagaa | caccggtaac | gtgtatacta | 60 |
| tcattgtgat | catcttttc | tctgtcattg | aaggtgccac | ttgagctgtc | aagtccctcc | 120 |
| acctctgggc | gtattccttg | aatgactcat | gctcttttt | acacatgttt | tgtagttgcg | 180 |
| ttctatccgg | agccgtatca | taattgtact | gatattgcct | aacgaaggca | accattaagt | 240 |
| ccttccaaga | atagactcgg | gaaagttcca | agttagtgtc | ataccctaat | ttcgtccggg | 300 |
| gattattact | tgacgacatg | caacctttga | ttggccgttt | caagatactt | ggcccccttt | 360 |
| gttgcacaat | atgtaagtct | tgagacccac | cggagtcaaa | aagaaccagg | gtta | 414 |
| | 6397 710 DNA Glycine max | | : | | | |
| <223> <400> | unsure at a | all n locati | lons | | | |
| tttcgattca | ttctatgtac | ccgtagtggt | ccacattgtg | tttcgtgcat | ttttattctc | 60 |
| gttttgttta | ctttttatac | cccctcttg | acgtgcttaa | gccattttac | ttaagtcatt | 120 |



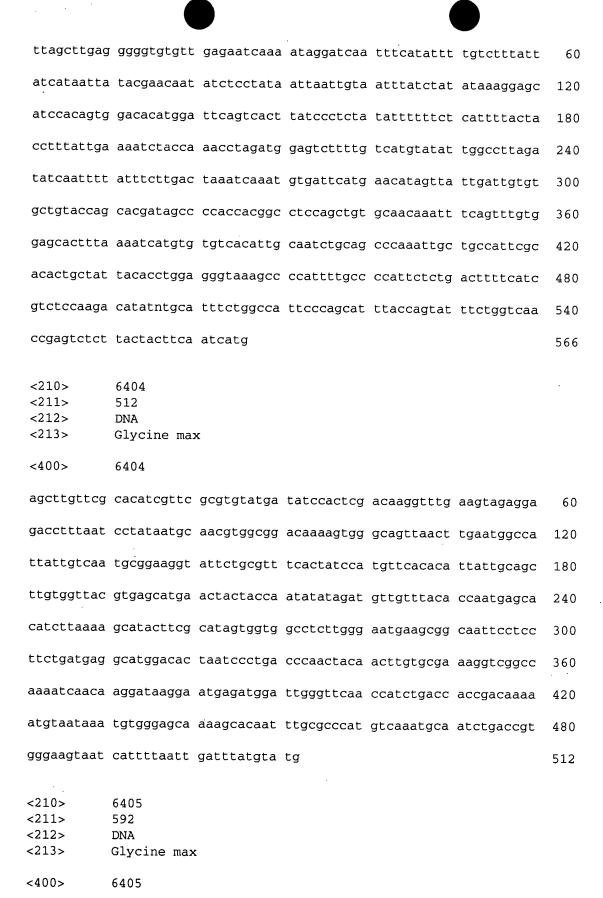
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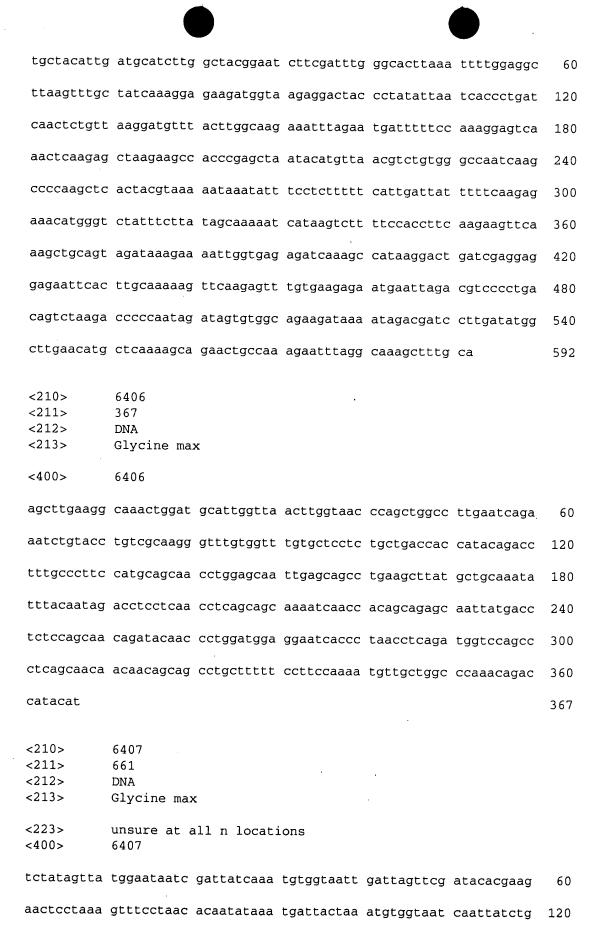
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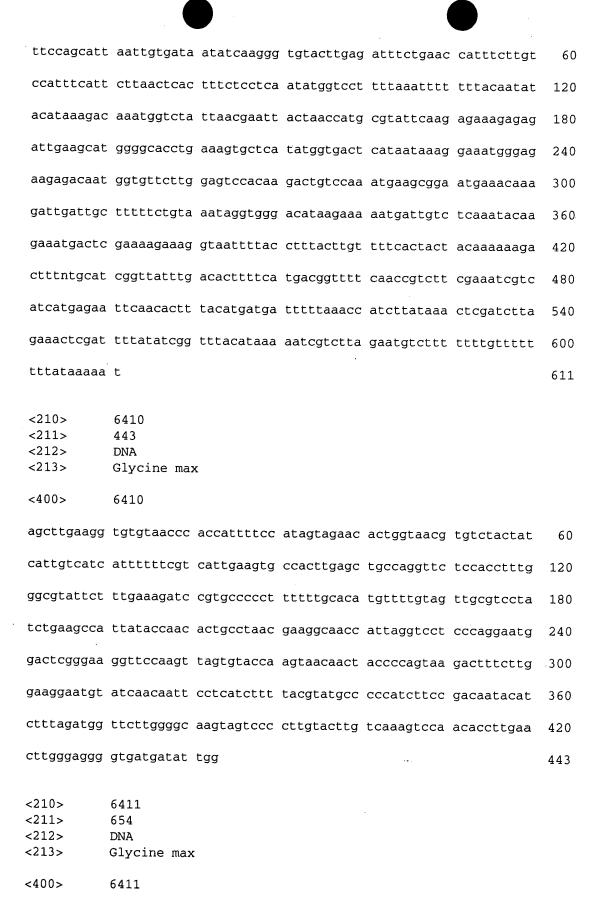
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| aagagttggg | tctagccacg | gcccacgagc | atagaatcgc | ggatgagtat | gcccaagtat | 120 |
| atgcggaaaa | agaggctaga | ggaagggtga | tcgactcttt | acaccaagag | gcaaccatgt | 180 |
| ggatggatcg | gtttgctctt | accttgaacg | ggagtcaaga | acttccccga | ttgttagcca | 240 |
| aggccaaggc | gatggcagac | acctactccg | ccccgaaga | gattcatggg | cttctcggct | 300 |
| attgtcagca | tatgatagac | ttaatggccc | acataattag | aaatcgttag | gaaacttgta | 360 |
| tggtctctca | gaccttgact | agatatgatt | tcttttttg | aaataaaatg | agttggtccc | 420 |
| atgtttctac | tccaaaaagc | ttgtgcaaat | caaatcactc | ctacgtctca | tctctagcat | 480 |
| gcattttctt | tctttaccca | ctcctcacgt | ttggttnttt | agggaaaaca | ccataactaa | 540 |
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| <210> <211> <212> <213> | 6400 467 DNA Glycine max | ς. | | | | |
| <400> | 6400 | | | | | |
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| ttctcttttt | tgtattttta | ataacatgat | ggtgataaaa | tgttgaggat | atatgctttc | 120 |
| ttttgtttta | gtttttcttg | ttggaatata | tttttttatg | ctttagttca | aaatttatat | 180 |
| ttttaaaata | taattagaaa | aaaatatata | taaattttta | agttgattat | tataaaaata | 240 |
| tttttttatt | tatatgacca | tttatatttt | taaaatataa | ttggagaaaa | aataaaaaaa | 300 |
| atgaaacata | ataaactgaa | agtatttaat | tcaaacaaag | aattcaaaat | ttaagaaatt | 360 |
| taaattggtt | tatccaacca | acaaatttaa | aaaatctaag | cattttaatt | caacaacccg | 420 |
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| | 6401 661 DNA Glycine max unsure at a | | ons | | | |

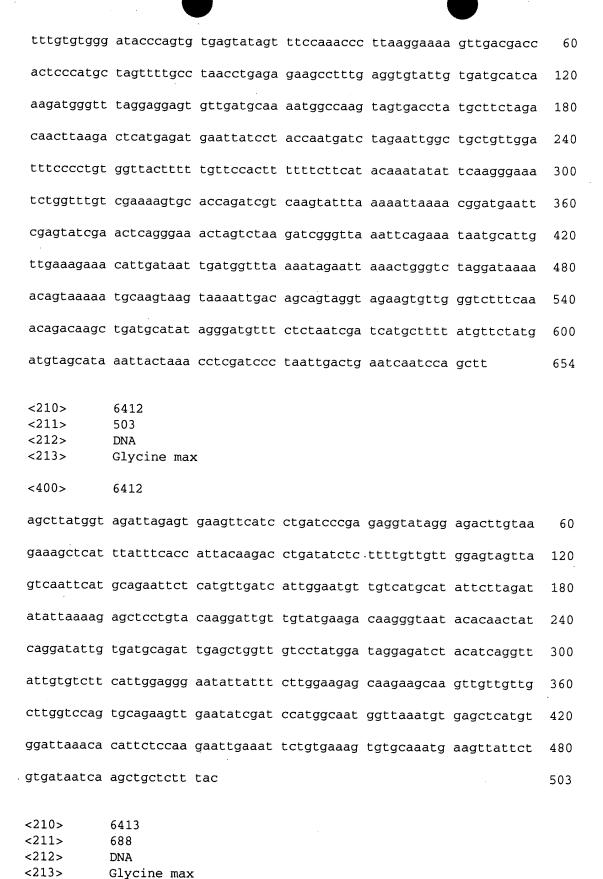
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| aagatgcgga | catagaacaa | tagttgacag | caccttattc | tccttaacaa | aatggcaccg | 120 |
| tagaaaggaa | gaataggact | attatggaga | tggctaggtg | tttgcttcat | gaaaaagaat | 180 |
| tgccaaagag | attttgggcg | gaagccgcaa | atattgcagt | tttcatgctt | aacagactgc | 240 |
| caacaaaagc | tttgcaaaag | aagacaccat | ttgaagcatg | gtatggctat | aaacctgagt | 300 |
| tgctcaatct | gaagatattt | ggttgtttgt | gctttttctt | acattcctcg | ggttaagaag | 360 |
| gacaaactat | acaagaaagc | agaagctgta | acctttgtag | gctatagctt | aatttcaaag | 420 |
| gcctacatga | tctatttgcc | acatcatgac | aaagtaattg | ttagcaagaa | tatgagattc | 480 |
| ttggagctgg | atagttggaa | ctgggaagat | gacaagaaga | ttgaatntca | gaaggagaat | 540 |
| gagaacatag | acaaagaacc | tgccagagga | acaagatcac | tttttgatat | ctatcanagg | 600 |
| tgtaatgttt | ctctcatgga | acctgcacga | tatgaggagg | ctacaccaat | aaaaaatgga | 660 |
| t | | | | | | 661 |
| <210> <211> <212> <213> | 6402 338 DNA Glycine max | ζ | | | | |
| <400> | 6402 | | | | | |
| agctttcaga | aaatgtcaat | gtcgagcata | tactattttt | cttccatgtt | tcagttgtat | 60 |
| gtagcttgta | tcttcttcac | agatagggca | tgcatgatgg | tccttaacac | tgtatccact | 120 |
| caaattcttg | tatgccgaaa | agccattaat | gggaaaaaat | agcattgcat | gcaacttgga | 180 |
| tgcctcattt | tgatacccat | caaacatgac | aatccctttg | tcccataact | ttgtcaagtc | 240 |
| tttaatcaag | ggactaagat | aaacatcaat | gtcttttcct | aagtgtcttg | ggcccaatat | 300 |
| tatcataaac | aatatcatgt | attttcgctt | catgcaca | | | 338 |
| <210> <211> <212> <213> | 6403 566 DNA Glycine max unsure at a | | ons | | | |
| <400> | 6103 | II IUCALI | OIIO | | | |





| gaaccacaac | | | | | | |
|--|--|--|--|--|---|---|
| gaaccacac | gacttccttc | tgttggaact | agcttatgta | atcggttact | aaaaatggta | 180 |
| atcaattaat | ttgatgattc | ttatcaaatt | tcaagagaag | tgagttttgt | tgcttgttct | 240 |
| aacactttgt | aattaattac | caaacttggt | aatcaattac | actatgttga | attcattgct | 300 |
| tctaagaaac | tttgagatta | atacatttat | cttatcatgt | tggattccta | ctaaacctat | 360 |
| atgataaaac | taagtctaaa | acacttgtca | tgcctagtct | aaaaacattt | gatagaaatg | 420 |
| tcacatctta | aaaaacttgt | ttggcgttgt | aaacttatta | aaaccaaaag | atcctaagac | 480 |
| taatcttcaa | gtcttcaatc | actttgattc | aacacgcaag | accacttgaa | taagaaaatg | 540 |
| tgggtgtcct | tctaaattaa | aagggaaggc | ttgtgagaac | catanggtgg | agacttactg | 600 |
| tagaatgtgg | gttatataac | catacagcga | tgtgaacatt | gcttggtcat | tcatatgtta | 660 |
| g | | | | | | 661 |
| <210> <211> <212> <213> | 6408 479 DNA Glycine max | ς. | | | | |
| <400> | 6408 | | | | | |
| | | | | | | |
| | gaacagtcag | ctctttaagg | aaaaaaaaa | atcctctttt | ctagcttatg | 60 |
| agcttcattt | | | | • | | 60 120 |
| agcttcattt tataaataaa | gaacagtcag atactaattg | gacaacgact | aacgtatttt | gttgaactag | | 120 |
| agcttcattt tataaataaa gtatgatgca | gaacagtcag atactaattg | gacaacgact | aacgtatttt | gttgaactag tttgagcgtg | attttgaagg gacatatgta | 120 |
| agcttcattt tataaataaa gtatgatgca aacttggtaa | gaacagtcag atactaattg cgagaaaaga tgtaaaaaaa | gacaacgact aatagtttgt aagtgtcaaa | aacgtatttt ttgtgtatgt ttgagtttat | gttgaactag tttgagcgtg attgaaatta | attttgaagg gacatatgta | 120 |
| agcttcattt tataaataaa gtatgatgca aacttggtaa ctagaaaagt | gaacagtcag atactaattg cgagaaaaga tgtaaaaaaa | gacaacgact aatagtttgt aagtgtcaaa aagaaagata | aacgtatttt ttgtgtatgt ttgagtttat acataaaaaa | gttgaactag tttgagcgtg attgaaatta taataaaaac | attttgaagg gacatatgta aaaaaaatcc attatcttac | 120 . 180 . 240 |
| agcttcattt tataaataaa gtatgatgca aacttggtaa ctagaaaagt aaagctttat | gaacagtcag atactaattg cgagaaaaga tgtaaaaaaa aatataataa | gacaacgact aatagtttgt aagtgtcaaa aagaaagata attagaaaac | aacgtatttt ttgtgtatgt ttgagtttat acataaaaaa tttctcataa | gttgaactag tttgagcgtg attgaaatta taataaaaac catattttat | attttgaagg gacatatgta aaaaaaatcc attatcttac cgtatcatcc | 120 . 180 . 240 . 300 |
| agcttcattt tataaataaa gtatgatgca aacttggtaa ctagaaaagt aaagctttat gctacttagg | gaacagtcag atactaattg cgagaaaaga tgtaaaaaaa aatataataa tgttattaaa | gacaacgact aatagtttgt aagtgtcaaa aagaaagata attagaaaac aaaaaaatat | aacgtatttt ttgtgtatgt ttgagtttat acataaaaaa tttctcataa gattctaagt | gttgaactag tttgagcgtg attgaaatta taataaaaac catatttat aaatgttctt | attttgaagg gacatatgta aaaaaaatcc attatcttac cgtatcatcc gcattactgt | 120 . 180 . 240 . 300 . 360 |
| agcttcattt tataaataaa gtatgatgca aacttggtaa ctagaaaagt aaagctttat gctacttagg | gaacagtcag atactaattg cgagaaaaga tgtaaaaaaa aatataataa tgttattaaa tcgaattctc aatctatctg 6409 611 DNA Glycine max | gacaacgact aatagtttgt aagtgtcaaa aagaaagata attagaaaac aaaaaaatat aagagtacat | aacgtatttt ttgtgtatgt ttgagtttat acataaaaaa tttctcataa gattctaagt gacatggatg | gttgaactag tttgagcgtg attgaaatta taataaaaac catatttat aaatgttctt | attttgaagg gacatatgta aaaaaaatcc attatcttac cgtatcatcc gcattactgt | 120 180 240 300 360 420 |





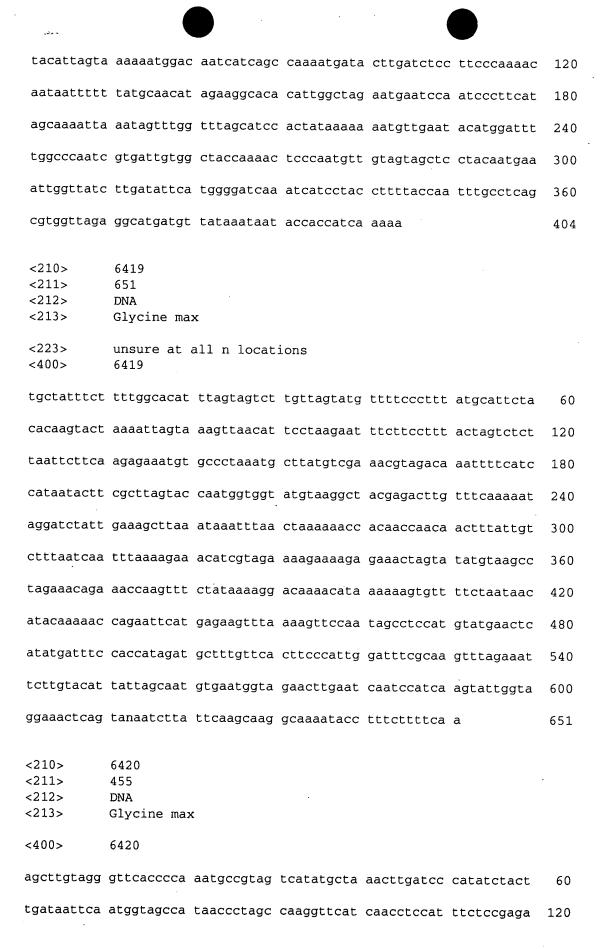
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| | | | | | | |
| | | | | gtgattatct | - | 120 |
| agttgaatca | aacatgaact | aaatctttta | agagcctaaa | agtgattatt | ggctgcaaaa | 180 |
| aagacttcaa | ctaaccaaat | ccatacaaaa | caagcactaa | ccaaagttct | ctcatgtaca | 240 |
| acattgacaa | aaatgtgttc | tacttctaat | gcgccctttc | caatttccaa | attcagtttc | 300 |
| taaacctttg | aagagctcga | gtgattactg | accgtaaaaa | tcatattctc | agggccaaaa | 360 |
| tgcagtgagt | tatggcgctt | tattacttgc | aacaaaaaa | tgcgcaatac | ctgttatcaa | 420 |
| aagggagata | atgctttgaa | aacttttaaa | tagatatcat | tctcttcaaa | ttaaccaata | 480 |
| aatgtgccac | aactaaaatg | aacaattacc | caatcaaatc | cagatgaaga | ctgactcatt | 540 |
| caaatgcatt | gtataagttt | acttgcatga | cangagcatt | ttcataagca | actaaattta | 600 |
| aattttacct | atataaagct | ggtaggtttg | ctcggtctaa | taagctatga | aaattatcca | 660 |
| tttaatgcac | attaatccat | aggaatca | | | | 688 |
| | | | | | | |
| <210><211><211><212><213> | 6414 469 DNA Glycine max | ¢ | | | | |
| <211> <212> | 469 DNA | ς | | | | |
| <211> <212> <213> <400> | 469 DNA Glycine max 6414 | | acacacagtc | acttgttgct | atccagtgta | 60 |
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| <211> <212> <213> <400> agcttgtgtg ttgttagcct tttttgtttt | 469 DNA Glycine max 6414 cagtaatata ttttttcac ctattttatc | aaatgtgtcc attttttttt ttgtaaaaca | tgcttactcc caagatgctc | cttttacttt | ctttttctct | 120 |
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| <211> <212> <213> <400> agcttgtgtg ttgttagcct tttttgtttt tttaaactag gtttcacttt | 469 DNA Glycine max 6414 cagtaatata tttttttcac ctattttatc tcaaaataac tgattaagaa | aaatgtgtcc atttttttt ttgtaaaaca ttataaccta ttacaaaatt | tgcttactcc caagatgctc ctgctcttaa cacacacaaa | cttttacttt tagttttaat aatgatttgc | ctttttctct ttaactaatt aaaatacact tggaacaaat | 120 180 240 |
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<212>

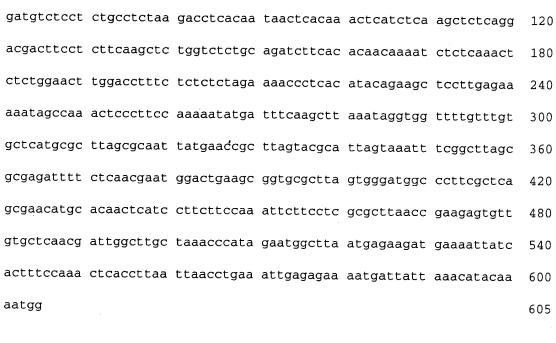
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| <213> | Glycine ma | x | | | | |
|----------------------------------|-----------------------------------|------------|------------|------------|------------|-----|
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| tcacagcaaa | tgatagaatg | tctatagttt | tatcatttga | caatttattg | ttattatatg | 60 |
| tcttatcctt | catatatata | gactctttt | tttcatcttt | ttcaactgtg | aatttttaca | 120 |
| taattcataa | attttatttg | ataccttgca | tagcattgca | tttagcaaat | acaatttaac | 180 |
| atgcttggtt | tataagtatt | gacacaaaaa | aggcttatga | aaataccttg | tattgcatgt | 240 |
| tgctagggct | tattaaaaat | atcaaataat | tttacatgtg | tctgtgaaat | cagacttatt | 300 |
| aatgatgcga | taaattatgt | aactatcatg | tctctcgttg | atgttgctaa | aaaaattgtt | 360 |
| taggaagtat | atggattaaa | agtgcattct | tcaaaaagtt | taaagatcga | gaacataatt | 420 |
| aacccattaa | attattatca | ataaaataac | cttaaattta | aaatacaaac | ataggtacat | 480 |
| gtaatttata | ttatcaatta | ttgataaaaa | aaaatataat | aatgtttatg | tgaacaaaat | 540 |
| atttttttga | ccaaaaaata | aacgcatgtg | ttttatattc | aaaatcattt | tacagtttaa | 600 |
| tatttaatgt | gtataaaaca | gtataattgt | agcaagctga | aaatagttta | tgaacatata | 660 |
| tataagtgtt | atcataagtc | tggcaaacat | gtttac | | | 696 |
| <210> <211> <212> <213> | 6416 598 DNA Glycine max | ς. | | | | |
| <400> | 6416 | • | | | | |
| taaacctgtt | atcgctgctc | gcattaggaa | attaataatg | cgaacaccat | gtggtcaccc | 60 |
| acgcctggaa | ggagggatca | cccctgaccg | ataaggtcca | aacctgcgca | ataacaacag | 120 |
| tagccagcat | tattctttga | aaaagaatgc | tgggcgataa | aggccctaat | atacggcata | 180 |
| agaaaaaaga | aatgcaagac | atgccgtata | ttagaataag | tgggggacta | caataaataa | 240 |
| tttgttcgaa | gaggatggca | tgtataaatc | gcgttgtaaa | accatgatat | tcctactaga | 300 |
| agaacaaaat | cctgcgatct | tgtagcataa | taaattacca | gtggtgaata | gggttgccca | 360 |
| ataaatcgaa | ccacattggc | caaactattg | acaaagaagt | gtgttaaaat | ccgttcatga | 420 |
| aatggcataa | agataataga | tactgtcctc | tagagacgcg | cgaggagaga | atgggagagt | 480 |
| gatactcggg | atagcctctc | ccatgtttgc | gaagtatatg | gggcaacatt | gtcttttact | 540 |
| | | | | | | |

| tcttcaagga | ggtcgggtcc | aaaggtagtc | taaacgctct | ctcgggagag | aggaaacg | 598 |
|----------------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| <210> <211> <212> <213> | 6417 958 DNA Glycine ma | x | | | | |
| <223> <400> | unsure at 6417 | all n locat | ions | | | |
| cactcactga | gcttatcggt | tctcccgctc | cccgcttgta | tcatattntn | agttataatt | 60 |
| gcctgnanna | ntccncctcn | ccncctcccg | gccccggcna | ttgatgacct | cgtaggtacg | 120 |
| ngccacgatc | tataaaatac | tgctgcatgc | ctgcagggtg | actctatatg | aggcgcgggt | 180 |
| actgatttta | atatccctag | gagcgtcgta | ggtaactcac | tggccagtga | tatcaccctc | 240 |
| tgaactggga | aaacatttgc | ataccccacc | aaggtcgtct | ggcggaacag | ccaccgtgcc | 300 |
| cagttggtag | aaagaggaat | aggcccacgc | gcgacaggcg | tatcgcacat | atggagactc | 360 |
| agaatggggg | atggggccta | acacagtatg | gtgcccttgc | acacctgagc | agtgtttaac | 420 |
| acactgggag | gggaactgct | agtagaagct | gtttagatgc | acacagtggg | acataatgac | 480 |
| gaaggattgc | cacaacaacc | cgtgacgcag | aacgactgag | agagcgagag | tggccattna | 540 |
| ctngnntaaa | acacatacga | tagaagacgt | cccggcttgg | aataactgca | gagggtgctt | 600 |
| gaagggttat | gaacagccga | cagagactgg | catatgatat | acgcgtccat | tttcaattgt | 660 |
| tgattattca | cagcatcttc | acatcatgga | acaaagagag | cggggatctt | tcatatggat | 720 |
| acggaaagca | atggaggaac | catggggggg | actagatact | ggttaaatag | gagtatgagt | 780 |
| acccaaacag | cttattggcc | ctatgttggg | cctgttttat | atgaggaaac | gtcgaaccat | 840 |
| tggaaataca | acctacgtcg | aactatttgc | ctacaacgtt | gggtgagaga | acgaaacact | 900 |
| tctgtctcta | attattcaga | tgcaacggta | gcggtttcct | cacgcaaccc | tcgaaaag | 958 |
| <210> <211> <212> <213> | 6418 404 DNA Glycine max | 5 | · | | | |
| <400> | 6418 | | | | | |
| agcttgcttc | tacagtatgg | gaaaaaaata | aggagaataa | aatgatgctt | cttccattct | 60 |



| atacgactt | c aacgcaacgt | gtgcttgtca | cagaaaagco | : ccggggcgct | tcattgagca | 180 |
|-------------------------------------|---|------------------|------------|--------------|--------------|-----|
| ttgtagggc | t ctgaagcgta | aggtgcaagg | tctaattgat | acgggctggc | tgaaatttga | 240 |
| agagaatcg | c ttgatgaatc | ctaacattaa | caagcgacac | catacatggg | gcaattctgg | 300 |
| aagctgttgt | tatgactcat | caagatcttt | aagtttatgc | cataaaccac | : agttacaatg | 360 |
| ttaaatgata | a tagataaaaa | ggacattctt | tcacgaacac | atcttttggt | tattcaactt | 420 |
| ccaacggcat | gtgagtgtaa | acccttggcc | tgttt | | | 455 |
| <210> <211> <212> <213> <223> <400> | 6421 604 DNA Glycine ma unsure at 6 | x all n locat | ions | | | |
| tctcccctat | tttgctatca | atggggggag | aagtgaatat | gataagggtt | caacccctta | 60 |
| ggcacttctc | tctctctctc | gaatttgctg | aggaaaatta | tttccgtgaa | gaaaattcaa | 120 |
| gccgaggcgc | ttgcgtaacg | tttccgtgag | taattacgcg | aagagtctcg | accgttcttc | 180 |
| aaaattcatc | gatcgttctt | cattttcttc | aatcttcaac | gggtgagtac | ttcaaaccaa | 240 |
| gcttttacat | tcattctatg | tacccgtggt | ggtgcaaatt | ttgcttcatg | tgtgtatatt | 300 |
| cttgttttca | ttcacttttt | ataccccctt | ttgacgtgct | taagccattt | gtttaagtca | 360 |
| tttctcgctt | aatctaaaaa | taaaatatac | tttcaccgat | cgtttgaatt | gtgtcattcg | 420 |
| atacttttgg | ttaatatgaa | ttccgaccgt | tcggacgtgc | cgtaaccacg | ttggaaatan | 480 |
| | aaaataataa | | | | | 540 |
| | agacgttntc | tctgtgggat | ttctgattct | taattgaatc | gactaataac | 600 |
| taaa | | | | | | 604 |
| <210> <211> <212> <213> | 6422 605 DNA Glycine max | | · | | · . | |
| <400> | 6422 | + V . | | | | |
| agcttccttt | acaataaaga | taagagaaag | atgaaggatt | gaagaaacac | aagtggtagg | 60 |



| <210> | 6423 |
|-------|------|
| <211> | 591 |
| <212> | DNA |

<213> Glycine max

<400> 6423

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<210> 6424 <211> 640

<212> DNA

<213> Glycine max

| <400> | 6424 | | | | | |
|----------------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| agcttaacaa | ttaccttatt | aaaaatcatg | atttatttaa | aatgacataa | aaaataataa | 60 |
| aattatcatc | tagttaagaa | aaataacaag | aaaaatgaat | aaatatatta | agaataaaag | 120 |
| tgaaagaaaa | tataaaaaat | taaaaattat | tatttaaaaa | aactgttatt | taatgtttta | 180 |
| aaaaacaata | gaagttactt | aaaaaaacat | atgtttaccg | aactgttaaa | caaatttttc | 240 |
| aaatatttaa | aaaactaaaa | attaattaaa | atgtgttatt | aaacataacc | taataacact | 300 |
| cattaataag | acactaaatt | taggcttttt | tttacgttaa | tggggtaatt | ttttttcaaa | 360 |
| attaccaaaa | ttaatacctt | ttgagttatt | tatgaaaaga | attaaattgt | cattaaaaac | 420 |
| acgattttca | atacaaagat | atggtgcgtg | caaacaaaaa | ttttctttt | caaaaacaat | 480 |
| gaacaattct | ggtttggttt | aaaataatgg | gattaagtga | aatcggacgt | ccttgaggat | 540 |
| tcaacttaat | ttttaatata | aactaaggcc | gtttaacagg | gaatttggtt | tttttttaa | 600 |
| aacaacgaat | tatagggggt | tttttgttag | ctaaaattta | | | 640 |
| <210> <211> <212> <213> | 6425 518 DNA Glycine max | c | | | | |
| <400> | 6425 | • | | | | |
| tggaccgttg | gacgtgcatt | gcatgaaaat | aattagtata | aaaaactaac | tgatcgctat | 60 |
| aaacatagtt | tggaaaaaca | aaaaggaagc | atcattacgg | catgtgcaat | gcattatatt | 120 |
| aaaaatagga | caaaaatata | tttttgatta | ctatattttc | atcaaatctt | atttttattc | 180 |
| tttaaacttt | tatattctct | aatttgatcc | ctaattcttt | ttttaaacaa | tgtttttagc | 240 |
| tatttttcac | agattttcat | taacaatgtt | aacttgagtt | gtgtccagcg | tgataaatat | 300 |
| tgtgcttttt | taaattttt | tataaatatg | taaaaaataa | attatcattt | tttaaataaa | 360 |
| attatcattt | ttttttcaaa | tatattaaaa | cctaactttt | aacgacttca | tctctatttt | 420 |
| gatttttacc | ttcattatta | ttatttctta | tttgttcatt | gaaccgaggt | ttcgaataag | 480 |
| gatgagaacc | cgcctttgca | atcatgcaca | tgaaaaaa | | | 518 |
| <210> <211> <212> | 6426 282 DNA | | | | | |

| <213> | Glycine ma | x | | | | |
|-------------------------------------|---|-------------------|------------|------------|------------|-----|
| <400> | 6426 | | | | | |
| agcttgactt | tggtttagac | atgattgata | catgatttgg | gacttgtagg | atttgatttg | 60 |
| ggcaagattg | gatgagggga | aatgtggttt | tcgaaatctg | ctctttgtgc | aaatttttgc | 120 |
| tgtgaaattg | tgcaccagaa | ttttgcacaa | gtgcagaaaa | atgctatgca | tttgctggtt | 180 |
| gtggaaagag | cagtgcagaa | tgagttctgg | atgtttgcta | gtagatccca | acggtcaaaa | 240 |
| tgtaggctta | tgtactagac | acttccagta | aaattttgga | at | | 282 |
| <210> <211> <212> <213> <223> <400> | 6427 578 DNA Glycine ma unsure at 6427 | x all n locat: | ions | | | |
| tgagatgagg | aagcgtaaaa | gggtgaaact | tcctqctttt | attcgttgac | cacagagtgg | 60 |
| | | gggtcgggag | | | | 120 |
| | | atcccgaccc | | | | 180 |
| | | agctcttggc | | | | 240 |
| aagcaaggag | gcttgtgtgg | tggctggcca | gctgcgaact | ttgattgata | tgtgagatat | 300 |
| ggcctctggt | aatcgattac | caagggtggg | taatcgatta | caaggcttaa | aaatgaagac | 360 |
| agaaggctaa | gatggtctct | ggtaatcgat | taccaagggg | tgtaatcgat | taccaggctt | 420 |
| gaaaacgagg | tcaggaagct | aggagagctt | ctagtaatcg | attaccaagg | ggtgtaatcg | 480 |
| attaccaggc | ttcaaaaagg | gaactgtaga | ctatggaggc | ctctggtaat | caattaccan | 540 |
| tctgtgtaat | cgattacaca | gaggaatggg | cactggta | | | 578 |
| <210> <211> <212> <213> | 6428 445 DNA Glycine max | ς | | | | |
| <400> | 6428 | | | | | |
| | | caagcaatca | | | | 60 |
| gcgactggtc | cctttcttcc | cttcgcaact | tgagttcatt | attgctaccc | catagagctc | 120 |

| cgcgaaattt | gttccggcca | tagtcttcct | tgcgagccct | cttggtctct | tgttcaaggg | 180 |
|-------------------------------------|---|------------------|------------|------------|------------|-----|
| ctcttgcggt | aattgcattc | tcttcccgta | acccggcaca | ctccttccga | acgtgtgtag | 240 |
| cagccaactt | ggacttctcc | ttggcgagtt | ttgcctttcc | taactcgctt | ttgagagctt | 300 |
| ggacttcct | gtectettee | ggtgcttcaa | aattctcttc | gctgacgact | tttaacttgg | 360 |
| cgagccaatc | taaacctcgt | atgcgaactt | tcaaccattc | gtggtaccca | ccaatgatgc | 420 |
| ccttacgaac | ccctctaagc | tcttg | | | | 445 |
| <210> <211> <212> <213> <223> <400> | 6429 562 DNA Glycine manunsure at 6429 | x all n locat | ions | | | |
| tggagaggat | gcttcaatgg | aggaaaagaa | agagggagag | aaagagagag | gggggagcac | 60 |
| gaaattgaag | gaagaaaaag | ggagagaagt | ttaagtttga | gttgtgtctc | acaagactct | 120 |
| cattcatcaa | agttacaata | agtgttacac | atgcttctat | ttatagacta | ggtagctagc | 180 |
| ttccttgaga | agctttcttc | agaaaacttc | cttgagaagc | ttctttgaga | aaacttcctt | 240 |
| gagaagctaa | agcttagcta | cacacaccta | tctaaaaact | aagctcacct | ccttgagaag | 300 |
| cttccttgag | aagctagagc | ttagctacac | acacccatct | aaaaactaag | ctcacctnct | 360 |
| tgacaaaatt | catcgaaata | ccaaaaaaaa | gtccctacta | caaagactac | tcaaaatgcc | 420 |
| ctgaaataca | aggctaaaac | cctatactac | tagaatggtc | anatacaacg | cccaaaagaa | 480 |
| ggaaaaccta | ttctaatatt | acaaagagag | tggaccaacc | ttgatcatgg | gctcaaaaat | 540 |
| tgccctaagg | tcatgagacc | ct | | | | 562 |
| <210> <211> <212> <213> <400> | 6430 224 DNA Glycine max | ζ | | | | |
| | cacatcgttc | acaaatataa | tatccactct | acaaccttt | aaatacaaca | 60 |
| | cctataaagc | | | | | 60 |
| Jacobboat | Juliana | aacggggcgg | acaaaaaayg | gcacataact | Lyaatggcaa | 120 |

| taattgtcaa | tgcggaaagt | attctgcgct | ttactatccc | tgttcacaca | ı ttatttcaac | 180 |
|-------------------------|--------------------|--------------|------------|------------|--------------|-----|
| ttgtgggtad | gcgagcctga | a accactatat | ataaatggtg | gtta | | 224 |
| <210> <211> <212> | 6431 717 DNA | | | | | |
| <213> | Glycine ma | ıx | | | | |
| <400> | 6431 | | | | | |
| tcatggtgaa | tcaaaggtga | ıttcaaaggtg | ttttgatgat | aacaatgatg | ataacaaaag | 60 |
| atgacgacaa | aggtgatgac | : aaaaagctca | aagatcaatc | aagaacaatt | caagagttca | 120 |
| agataagaat | caagaagaat | tcaagactca | agaagaaagt | ctagagacaa | gaatcaagat | 180 |
| tcaaggttca | aagatctcaa | gaatcaagat | caagaatcaa | gaatgaagag | aagactcaat | 240 |
| caagataagt | attaaaaagt | ttttcaaaac | tttgaatagc | acatgagttt | ttgacaaaac | 300 |
| cttttaccaa | agagttttta | ctctctcgta | atcgattacc | atattgttat | aatcgattac | 360 |
| cagaagcaaa | atgagtttga | gaaagttttg | aactgaattt | caacgttcaa | tttattttca | 420 |
| aaaggcttaa | tcgattacaa | tgttttggaa | tcgataccag | tgccttgacg | ttgaatctat | 480 |
| tcaaggtgaa | agcacacctt | tacttaaagc | ttgtgaatcg | atacactaat | tgggaatcga | 540 |
| taccaggact | gttctgataa | tcaaagatgt | actctcaaaa | aggttttgac | ttttcaattg | 600 |
| gtttaagttt | tctaaaatta | tactctctaa | tggcctcttg | ccagactgag | agcttataag | 660 |
| caggcttgat | tgctttcaga | attactttcc | atcatccttt | cagcctgaat | tttttga | 717 |
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| <211> | 470 | | | • | | |
| <212> | DNA | | | | | • |
| <213> | Glycine ma | x | | | | |
| <400> | 6432 | | | | | |
| agcttgacga | aatctagatg | gcgatgcctc | agcaacagct | tgtacttgtt | tctcgggcac | 60 |
| agcaaagcat | acagaatgct | cactactagc | ctacataaat | actgaaaatg | attaatgcca | 120 |
| | | | | aagttataaa | | 180 |
| | | | | aaaaatagca | | 240 |
| ctggaacacc | agacattcca | gttctgcaaa | aaagcatcaa | agaaaaattt | attggaatct | 300 |

| | | | | | - | |
|----------------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| acaacttgga | ı caattaatat | tggttaaaga | aaaccttaaa | ttaaatagaa | atccctcggc | 360 |
| aggaaaaaat | gccaactatt | catcatgtaa | cacaacttgc | atttatgact | caccccttga | 420 |
| cgtttacaaa | tgccaaagtt | gcctatggat | gcaaaatctt | tgacaaaatt | | 470 |
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| tgtaatgtca | gaaaaggcta | acacagaaaa | tatgaagcgc | ggatgattac | tagaagcatt | 60 |
| tcacactata | ttagagaata | atgccacaat | ttaacttctt | gtcatctttt | cttttgattt | 120 |
| tccctttaac | aatttctatg | agcagatgat | ttttatgtga | aattgcgaat | agctaatact | 180 |
| ctaaagttag | tcttcattaa | tatgagatca | tgatccttga | aatccatggt | cctattatgg | 240 |
| tcttcacata | cttcaatgtt | gtcctgattc | atgagtaaag | gaaaaaaaa | attgaaatat | 300 |
| tcatttaagt | gagtgtacat | gtatattaag | agctgtaaaa | aaggataagg | tcaatactag | 360 |
| aatttattt | ctggctcagt | cagctgtgaa | agattcaaga | gtgaaataga | aacttagaag | 420 |
| ataatcgaga | ttactacggc | gtaacataat | ttggtactcc | ttttcattat | actatgatat | 480 |
| agctatgtat | ttctatagcg | agatcatata | ctaactgaat | ctgagctgac | ataacatagg | 540 |
| aattgacaga | tttcagatat | ctaatatagc | actagaaaag | tctttactct | aacattgtcc | 600 |
| cctc | | | | | | 604 |
| <210> <211> <212> <213> | 6434 540 DNA Glycine max | × | | | | |
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| agcttgaagt | gaaaaatgtt | aactggagca | acctaatttt | tacatcaaag | cctaatcagc | 60 |
| atcaacacta | ctattttaat | ctttttctca | taaaggattc | aatcctactg | atgttgtggt | 120 |
| gcagcagagt | aatgcaaggt | ctatttgatg | ccagtaagta | atccttttat | ttccaaattc | 180 |
| agagcaattc | caacaaaagg | ttccatgacc | aaccctaatt | attaaagaac | tcagttcact | 240 |
| gatatgtatg | aataaatgat | gcaagaaagc | atgcaaacta | tagaacaaca | aagaaattgt | 300 |

| ttcttctgca | gattctagat | aatgccaaag | cctaaagaaa | caagctaaag | tattatggtt. | 360 |
|---------------------------|-----------------------------------|--------------|------------|------------|-------------|-----|
| cacttgaaat | attaaggtgg | , aagaaatgta | acaagtaata | tttgtttttg | atgcatcaga | 420 |
| acaaatgcaa | caagtaatat | gatgctatta | tacatcacgg | atatagctta | aaataaaag | 480 |
| ccaaaaggag | ggaaaggaaa | . actcctttat | tggacttagc | ccataaaaaa | aaaaagtaaa | 540 |
| <210><211><211><212><213> | 6435 676 DNA Glycine ma | × | | | | |
| <223> <400> | unsure at 6435 | all n locat | ions | | | |
| tgtaatttcc | ttctttttcg | atattttgag | gtgacaaaaa | gatttgtatc | aatggtgggt | 60 |
| acataaaatt | cagaagaaaa | atattattgt | ttaagtgtgg | ttatgtagtg | gctaagtgga | 120 |
| gacatgatct | gaataatcct | tctactagtt | cataagtgga | ttgtctctgg | agtaaaatag | 180 |
| ggacaacgga | atgcacaaag | atgggggttg | gtggctagaa | accataatgg | aaataggaga | 240 |
| ggctttaggt | ttccaatgac | cccttcaaag | cagtttttga | agaccaatgg | cgtagatgaa | 300 |
| gtcccttatc | agttggacat | tcatatttct | aaagatgcag | ttgaataata | ctagtattct | 360 |
| attgtaaaaa | taaataaaaa | aatgcactaa | atggcagaag | atatgctaţc | aatttcggcg | 420 |
| ctaaccatga | ttcttatcat | aaggaaattg | ttgacggtgg | aaactaaaac | tcgagctagt | 480 |
| gtgggaaaat | ctttgatatt | gtttttgaaa | atttgaaatc | atatataagt | caggatgcat | 540 |
| tgaaataatg | ttcattntcc | attatcattn | tcaatcaaat | taagttctaa | cgaacacata | 600 |
| ttcatgcctc | accggcggta | actacctact | cccatatata | tatatatata | tatatatata | 660 |
| tatatatata | ttatga | | | | | 676 |
| <210> <211> <212> <213> | 6436 463 DNA Glycine max | ĸ | | | | |
| <400> | 6436 | | | | | |
| agcttcttat | taaataattt | aaaaaaaaa | aaaaaaaac | gtggttgcac | tatagccagc | 60 |
| atatgttgca | caatcacata | gttgatctca | cttcaagtct | atagttcagc | tttcatagac | 120 |
| ctgaattggc | gattaaagct | gctcaaaatc | atacaataaa | gaaccaaaac | ttagagggcc | 180 |

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| agacacaaaa | aattcataaa | ctagctttgt | acaattttga | tatcatagaa | aaagaagaga | 240 |
|-------------------------------------|--|-------------------|------------|------------|------------|-----|
| taaaagtcta | gttttgatta | taggatatga | tatgttccaa | cctagcatta | atctaaatat | 300 |
| cagtaagcat | gcatttttcc | caagctagag | gttgagatcg | agtcggcttc | aattgcatct | 360 |
| gaattacgcg | agtaaatagg | cattttggtc | cttgactttt | gacccttttt | gcaaattatt | 420 |
| ccctatcttt | ttggaaaggt | aaaaataatc | cctatctttc | cat | · | 463 |
| <210> <211> <212> <213> <223> <400> | 6437 776 DNA Glycine max unsure at a | c all n locat: | ions | | | |
| tcctcggggc | catttcctgc | gaaggcaaac | atttggaaag | ttagttttac | cagtgggaca | 60 |
| ctactcttaa | aacaaaaatg | gcatacaacc | tcctcccata | aatacaaaca | tcaatgtaaa | 120 |
| tttagagcaa | gcttatgcgc | atatttcctt | acgaacgttc | acttgcgcaa | gacattctat | 180 |
| taactaagaa | aaatgcaccc | atatacaatc | aaggcagctt | cgttacctag | attatttaca | 240 |
| tgcacttcca | aggtgtattt | gttacttaca | tcacacacat | ctccttggct | gaatttacat | 300 |
| acatgcatac | tcaaagcatt | ttggggtacc | aaaaattgca | catgtgctca | tcttggtatt | 360 |
| tctaatacct | atacatacac | aaactctatg | atgaatcttg | actacctaca | caataaggtg | 420 |
| ctacatttca | tgcccttttc | aagtttttgc | tacctaaagc | cgcatgcaaa | ttcaagtata | 480 |
| ttntcctttg | ctgactaaaa | tggtattcaa | attaaaaggt | atatatttt | ttttaatgta | 540 |
| ttttctttac | ataacatgca | acatatttat | atatnatttt | tgtgagacan | tttgactacc | 600 |
| aaaaattata | tgtacataca | tccaagtatt | ttctatcata | cccaaagtga | aaatgccaag | 660 |
| gtattttgct | acctattcta | aacctacaca | ttcatgacga | gcaaaattct | aaacatctag | 720 |
| gcgagggaaa | atatatagtg | tggcccatac | tgatggtggc | aaaaaaaaa | aaaaaa | 776 |
| <210> <211> <212> <213> | 6438 412 DNA Glycine max | | | | | |
| | | | | | | |

| agcttgtgca | aatcaaatca | ctcccacatc | ttatctctag | catgcattct | ttctttcttt | 60 |
|-------------------------------------|--|------------|------------|------------|------------|-----|
| acccactcct | cacgtttggt | tttttaggga | aaaacaccat | aactaaacgc | gccacaaggc | 120 |
| atccctatcg | caccagatcc | aaatctagaa | cgatgggtga | tcaagaggag | acacaagaac | 180 |
| agatgaaagc | cgacatgtcg | gctttgaaag | aacagatgac | ttccatgatg | gaggccatgt | 240 |
| taggaatgag | gcagctcatg | gagaaaaatg | tggccaccgc | tgccgctgtc | agttcggctg | 300 |
| ccgaagcaga | cccaactctc | ttggcaactg | cgcaccatcc | tccctcaaac | atagtaggac | 360 |
| ggggaaggga | cacactgggg | cacgatggca | accctcacct | gggatacaac | ca | 412 |
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| tattcaagtc | atggttgtca | aaatcatgat | ctgtcttata | aaatcatttg | attttaacat | 60 |
| | ttgacaatct | | | | | 120 |
| gattgctttt | gtccatgttt | aatcatggga | tcatttatcc | tggtgaggca | gaagacggac | 180 |
| aaaatcacaa | ggttggggtc | atatgatcca | gtttgggcaa | aacccctttt | tctccttcaa | 240 |
| acaatttcct | ttccatatgt | gactatgtga | cttctctaac | ctaatctcca | tcaattgttt | 300 |
| tttgaattgt | gtgccattgg | acctctttca | caactgttga | agctttacct | tgtgccacta | 360 |
| ttgctactgc | gggttgtggg | tagttntggc | actgtcaatt | gcacctcctt | tacctaacat | 420 |
| ctttctttgt | gggtctctct | tactcagtca | ctctcatctc | attctctgga | ttatctttct | 480 |
| tttcttttct | atggctgtcc | tcacagtcta | tagaattcct | tttgagtcat | agatgcttct | 540 |
| ctcacagagg | gtgaaccact | gaatagaata | ttntaattag | cttgtatgta | atgtcttatg | 600 |
| actcgttaat | atgttattag | aattcttatg | aatttttaat | cagggcttaa | ttgcttctct | 660 |
| catcatgaca | tat | | | | | 673 |
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| \400/ | 0440 | | | | | |

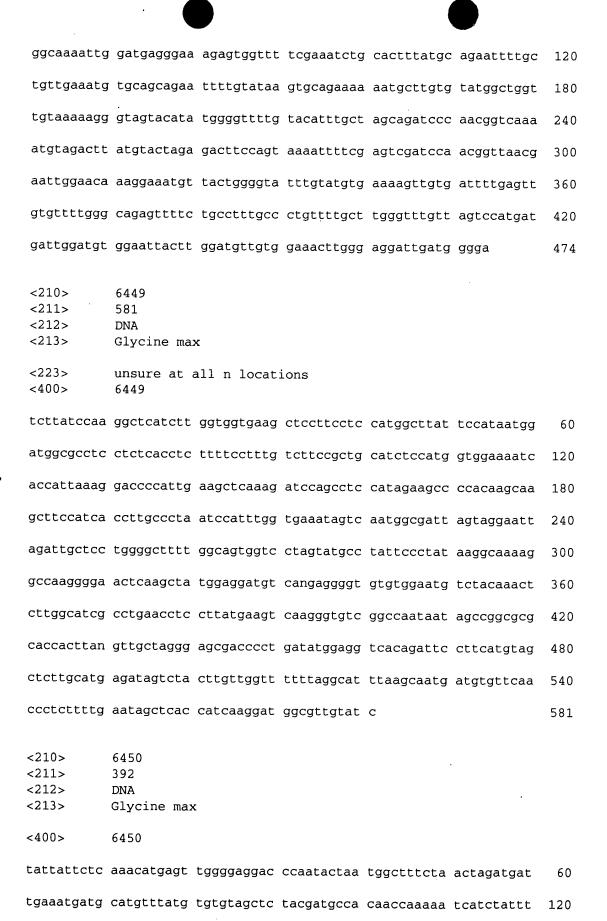
| agcttctaaa | ctttgtacaa | gaatgaagct | ctgataccac | ttgttagaca | agtggcctca | 60 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| gatatcttaa | gaaggggggg | ttgaattaag | atattccaaa | cttttcttct | aattaaaaat | 120 |
| ctatcttact | ttttacttaa | gttatgaatt | cccttaatga | caatcttctt | aaatattaat | 180 |
| tcaaatgaag | caacttgaat | tatgaatata | aagcaataat | aaataaagga | gattaaggga | 240 |
| agagaaaatg | caaactcagt | tttatactgg | ttcggccaca | cccttgtgcc | tacgttcagt | 300 |
| ccccaagcaa | cccgcttgag | agttccacta | acttgtaaat | tccttttaca | agttctaaac | 360 |
| acacaaagac | aacccttcct | ttgggtttag | agattcttta | caacaagaaa | ctcacagtct | 420 |
| cttaatccct | tagagaatg | | | | | 439 |
| <210> <211> <212> <213> | 6441 694 DNA Glycine max | κ | | | | |
| <223> <400> | unsure at 6 | all n locati | ions | | | |
| tgtctcagca | tttatgcgag | acggagacca | acatgctagc | tatcatcgcc | aagtaccaag | 60 |
| aagagttagg | tctagccacg | gcccacgagc | atagaatcgc | ggatgagtat | gctcaagtat | 120 |
| atgcggaaaa | agaggctaga | ggaagggtga | tcgactcttt | acaccaagag | gcaaccatgt | 180 |
| ggatggaccg | gtttgctctt | accttgaacg | ggagtcaaga | acttcccctc | ttgttagcca | 240 |
| aggccaaggc | gatggcagac | acctactcca | ccccgatga | gattcacggg | cttctcggct | 300 |
| attgtcagca | tatgatagac | ttaatggccc | acataattag | aaatcgttag | gaaacttgta | 360 |
| tggtctctca | gaccttgact | ggatacgact | tcttttttt | gaaataaaat | gagttggtcc | 420 |
| catgtttcta | ctccaaaaag | cttgtgcaaa | tcaaatcact | cctacatttc | atctctagca | 480 |
| tgcattttct | ttctttaccc | actcctcacg | tttggttntt | tagggaaaaa | caccataact | 540 |
| aaacgcgccg | caagggatcc | ctatcgcacc | agatccaaat | ctagaacgat | gggtgatcaa | 600 |
| gaggagacgc | angaacagat | gaaagccaca | tgtcggctct | gaaagaacaa | atggcctcca | 660 |
| tgatggaggc | catgttaagt | atgaagcagc | tcat | | | 694 |
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| <213> | Glycine ma | х | | | | |
|---|---|---|---|--|--|---|
| <400> | 6442 | | | | | |
| agctttaaac | tctattttta | attctatttt | tctctctaaa | tgtatattac | aatgcatata | 60 |
| tttgtaaata | attaatgagc | tcaaatattt | aaaatgtatt | ttttttacat | aaatcttata | 120 |
| aaataagtgt | tagaaacaca | ttttttaaca | ttatccttaa | cacatttaat | ggattgaaat | 180 |
| tgtttaaaaa | ttacaaaatc | atttcatgga | gtcattaaat | aagatgaatc | acacaatttt | . 240 |
| tttataattt | taagaaattt | caatcaagag | gatgtgtatt | taaaagaatg | agtgaaaata | 300 |
| tgttactaat | atttctcatc | ttgtaatatt | ttgagtctga | ttctttctaa | ttggataggg | 360 |
| aaatacacat | tatttttgtg | ggagccacaa | taatattttc | ttcgtcccgt | tataaataat | 420 |
| gtttaaggtt | tttttaaacc | gattaaaaaa | acaagtattt | taaagtgttt | tgtgtatttc | 480 |
| aaatg | | | | | | 485 |
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| | _ | | | | | |
| <223> <400> | _ | all n locat: | ions | | | |
| <400> | unsure at a | all n locat: | | catgtttact | accaaaacaa | 60 |
| <400> | unsure at a 6443 | all n locat: agaagaaatt | aataaactgg | catgtttact gctntctttt | | 60 |
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| <400> tgcatccata atacgaaaga tatcaaatta gaatagccat atctatagac ctgcaataat | unsure at a 6443 gctgcaaaga aatccttcca ctttttctaa aattggggat aggtttcctg tgataatttg | all n locat: agaagaaatt agaggccaac ttttagaaga atcagctaat ggtttcttgg agcaaacaag | aataaactgg tattcgggta ggcccccttt aaccttttat ggaataaagt taagtactga | gctntctttt tagcattttc gtttcacgat tgatgctatt | catgatatac tttttcacaa ttgatttatt gatcattata caatggatat | 120 180 240 300 |
| <400> tgcatccata atacgaaaga tatcaaatta gaatagccat atctatagac ctgcaataat gtcaatgtca | unsure at a 6443 gctgcaaaga aatccttcca cttttctaa aattggggat aggtttcctg tgataatttg cccttatccc | agaagaaatt agaggccaac ttttagaaga atcagctaat ggtttcttgg agcaaacaag tttgtgtaat | aataaactgg tattcgggta ggccccttt aaccttttat ggaataaagt taagtactga agnaactatt | gctntctttt tagcattttc gtttcacgat tgatgctatt tcaaatcata | catgatatac tttttcacaa ttgatttatt gatcattata caatggatat ttgtgtcatc | 120 180 240 300 360 |
| <400> tgcatccata atacgaaaga tatcaaatta gaatagccat atctatagac ctgcaataat gtcaatgtca cagtcattct | unsure at a 6443 gctgcaaaga aatccttcca ctttttctaa aattggggat aggtttcctg tgataatttg cccttatccc gccaactctt | agaagaaatt agaggccaac ttttagaaga atcagctaat ggtttcttgg agcaaacaag tttgtgtaat atcactttta | aataaactgg tattcgggta ggcccccttt aaccttttat ggaataaagt taagtactga agnaactatt taatattttg | gctntctttt tagcattttc gtttcacgat tgatgctatt tcaaatcata tttttacaaa | catgatatac tttttcacaa ttgatttatt gatcattata caatggatat ttgtgtcatc attatggtaa | 120 180 240 300 360 420 |
| <400> tgcatccata atacgaaaga tatcaaatta gaatagccat atctatagac ctgcaataat gtcaatgtca cagtcattct | unsure at a 6443 gctgcaaaga aatccttcca ctttttctaa aattggggat aggtttcctg tgataatttg cccttatccc gccaactctt | agaagaaatt agaggccaac ttttagaaga atcagctaat ggtttcttgg agcaaacaag tttgtgtaat atcactttta | aataaactgg tattcgggta ggcccccttt aaccttttat ggaataaagt taagtactga agnaactatt taatattttg | gctntctttt tagcattttc gtttcacgat tgatgctatt tcaaatcata tttttacaaa aagtaatcaa | catgatatac tttttcacaa ttgatttatt gatcattata caatggatat ttgtgtcatc attatggtaa | 120 180 240 300 360 420 480 |

| <212> <213> | DNA Glycine max | x | | | | |
|-------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| <400> | 6444 | | | | | |
| agcttgctta | tgtagagaga | tagagtgtgg | aaattaggag | tgcgagtgac | aatgttagct | 60 |
| tgcatgacag | ggaaatagtg | aaggtgaaac | taattattgt | aacccggtga | gttgtgtgaa | 120 |
| ccttaactgt | gaaagaacga | ctagcatcaa | gtactgatct | ttgcatgaat | ctttgattac | 180 |
| tgaatgtatg | catgatgtgg | aaatgatgaa | ggccatgttg | aatttatttc | agccacttag | 240 |
| ccaaacaact | accctatatt | aatgaatgat | tgaatccctt | gcaccccttt | tgagcctaaa | 300 |
| tgttaatgaa | tgactcattg | aaaggagcta | aatgcaaatg | ctatctttgt | acaccctatc | 360 |
| ttaagatata | aaagatcatt | cttatggatt | aagacaaatt | tgttccaaat | atgggg | 416 |
| <210> <211> <212> <213> | 6445 373 DNA Glycine max | | | | | |
| <400> | 6445 | | | | | |
| tgaatgtgac | aataatatag | agacaacatt | agcccctatc | cttcgttgag | ggacattatt | 60 |
| aagaaaaaaa | tcgaacgtct | tacattaacc | tcacatgtgc | tcaagtttct | gagtatgctc | 120 |
| aaattcagat | attgataaaa | gaatatttac | ccataacctc | tgatgcggcg | gtgcattatc | 180 |
| actgtctaat | agctccccca | ttgtgatata | acacgattac | tatactgact | tataaattat | 240 |
| tgatgtggag | gtggacggac | gaaatatact | gagcaaatat | tatgaggcga | atttaagaac | 300 |
| tgttcacgat | aacgaaccaa | tacaaattac | gattaatttg | tataactatg | gttgatgctg | 360 |
| ttctggatgg | cat | | | | | 373 |
| <210> <211> <212> <213> | 6446 558 DNA Glycine max | | | | · | |
| <400> | 6446 | | | | | _ |
| | cacaacaatc | | | | | 60 |
| | cggttaaaat | | | | | 120 |
| tcttgctttc | aaagaactac | ataggtatga | gttcctcatc | ggaattgagg | atacgttgga | 180 |

| gcaagagccc | cgctcttgtc | gacctcaaaa | agataaaaac | ataaaaaagg | gagaatgaaa | 240 |
|--|--------------------------------------|-------------------|------------|------------|------------|-----|
| taaagattga | agtcatgatt | ttgcacattt | ggattaaagg | ctgtcgtctg | atgtgacaga | 300 |
| cgtgtggggt | gctaatacct | tccccacacg | taaacaattc | tcgaaccttt | gatcctttaa | 360 |
| attcatagac | cgctttttgg | tttttctaac | cgtttcctca | aataaatgtt | ggtggcgact | 420 |
| ccgtgtattt | ttctttcctt | gaagacacac | ccatgagtct | tacgtcgccc | ttctgccgaa | 480 |
| gggtaggttg | tgacaattgg | cgactccact | tgggaatttt | tttaaaaagt | taacccttta | 540 |
| atctatgggc | atttttta | | | | | 558 |
| <210> <211> <212> <213> <223> <400> | 6447 590 DNA Glycine max unsure at a | k all n locat: | ions | | | |
| ttgaatgcac | tattcaatgg | agttgacaag | aacatcttca | gactgatcaa | cacttgcaca | 60 |
| gtggccaaag | atgtatggga | gatcctgaaa | atcactcatg | aaggaacctc | caaagtgaag | 120 |
| atgtccagat | tgcaactctt | ggctacaaaa | ttcgaaaatc | tgaagatgaa | ggaggaagag | 180 |
| tgtattcatg | acttccacat | gaacattctt | gaaattgcca | atgcttgcac | tgccttggga | 240 |
| gagaggataa | ctgatgaaaa | gctggtgaga | aagatcctca | gatccttgcc | taagagattt | 300 |
| gacatgaaag | tcactgcaat | agaggaggcc | caagacattt | gcaacatgag | agtggatgaa | 360 |
| ctcattggtt | cccttcaaac | ctttgagcta | agactctcgg | atggggctga | aaagaagagc | 420 |
| aaaaacttgg | cattcatgtc | caatgatgaa | ggagaagaag | atgagtatga | cctgnatact | 480 |
| gatgaaggtc | tgacaaaagc | agttgtgctc | ccgggaaagc | agttcaacaa | agtgatgagc | 540 |
| agaatggaca | ggaggcagaa | gcccatgtnc | agaacatccc | tttcgacatc | | 590 |
| <210> <211> <212> <213> | 6448 474 DNA Glycine max | ς | | | | |
| | | | | | | |

agcttgtcct tggtttagac atgattggta catgatttgg gacttgtagg attcaatttg 60



| ttgttaccaa | acaacctcaa | ctaatgaaat | gaggcatgtt | caatgtctaa | aatatagaaa | 180 |
|----------------------------------|------------------------------------|------------|------------|------------|------------|-----|
| ttacctatca | ttttacctat | aatggacaac | ctccccggga | catggtttca | ttattaggca | 240 |
| taaattcttg | ttgaattcga | ttatgaagcc | ttttgccaca | tagttggcta | aagcttagga | 300 |
| cgttatgctt | tagtccatca | atatataaaa | caattcttta | tcaaggtttt | gaatggaatt | 360 |
| ccaatatttt | ccttctccca | taattatccc | tt | | | 392 |
| <210> <211> <212> <213> | 6451 406 DNA Glycine ma | x | | | | |
| <400> | 6451 | | | | | |
| ttttgtctct | cttattaggc | aatggttggc | cctctctctc | tctattgtga | aatcctcatc | 60 |
| ttttattctt | ttctactttt | gcagcaacaa | caaatttaat | catcttttca | ccgacgagct | 120 |
| tgtccctttc | aataccaacc | ccgacaagat | gctcgacctc | caacacacca | ccaccttcct | 180 |
| cccctgcacc | aagatcaaag | cctctgctga | ttcctctgtc | accgctgact | ctgacctctg | 240 |
| cattttcact | actggcgccc | gccagatcac | tgatgagtca | cgcctcaacc | tcctctagag | 300 |
| gaacctctcc | ctcttcggca | ccaccattct | gactctcgtt | cgttactccc | ccaacgctat | 360 |
| tctcctcatç | atttccaacc | ctggcgacat | tctcacctac | acacat | | 406 |
| <210><211><211><212><213> | 6452 344' DNA Glycine max | × | | | | |
| <400> | 6452 | | | | | |
| agcttctacc | ttggctgaga | ttggttctat | tgttctttcc | actagcgacc | ctcactggaa | 60 |
| gtcccagctt | tctcacatgg | cttactccat | gtggcgccgc | cacaacctcc | cccttggcat | 120 |
| ttccaaaccc | ccctttcgcc | ccgccagacc | cccaataccc | caattggttc | gttccctcaa | 180 |
| tttcgcttct | cctttcttat | tgcaaattct | gttatttaaa | tctaattacc | tcaatttgat | 240 |
| ttatattttt | caagcctctg | atttcactct | atccttctct | tctatccttt | aaaactaaag | 300 |
| cttcttttt | ttttttttgt | gaccttctga | cctgaattgg | gaaa | | 344 |

| <210> <211> <212> <213> | 6453 635 DNA Glycine max | | | | | |
|----------------------------------|-----------------------------------|--------|------------|------------|------------|-----|
| <223> <400> | unsure at all n locations 6453 | | | | | |
| tacataaaag | gcagccttta aggg | ctagcc | cgcgggcccg | aaccctaagt | ggatgcacaa | 60 |
| aacaactttt | agattacttt tttg | ttgttt | ggttaagtta | aggagatgga | acaaggagca | 120 |
| caggtgtgtc | atatgagaaa ttca | atcatt | cttcattctt | acaatgtaat | gtccccagtt | 180 |
| tcagatgctc | tttttttctg ggtg | ggctgc | ctctatctat | cagcaaaagc | ccatcaaaga | 240 |
| tcctaatcga | aattcaatta tgat | atgtgc | aaattgggtt | gggcctattg | aagtctgtac | 300 |
| cttctaaaac | atattcttca gaag | aaatta | tgcaataaaa | tttttgtaaa | taaaaaaggg | 360 |
| gaaataaccc | taactgtgca acta | aatgaa | ctaatgaagt | tcccaaattc | ctctttgcta | 420 |
| cattaacgta | tatgttaact gtga | aatatc | ccacccgagg | aatactacac | atgaacgaat | 480 |
| ctagtaatat | attaatttaa tcag | caacac | attccataat | aaactggttc | tcagttgtta | 540 |
| agggttntac | tcagttgatt caac | aagagc | gtgagttggt | atanaagttc | ttaanaatgt | 600 |
| tttcaatttc | tacccataaa aaaa | aattga | ttctc | | | 635 |
| | 6454 441 DNA Glycine max | • | | | · | |
| <400> | 6454 | | | | | • |
| agcttgctaa | cccatggaag ctcc | taatat | ctcccacact | ttttggggtg | ggccattcgt | 60 |
| ggatggcctt | gatttcccag ggtc | cacatg | gaccccattt | ctaccaacta | caaaacctaa | 120 |
| gaaaactata | ttatctacac aaaa | ggtaca | cttctctata | tttgcataga | gggtgttttt | 180 |
| cctatggact | gaaagaactt acct | gagatg | tcctaagtga | tcatctaggc | tcctattgta | 240 |
| cactaaaata | tcatcaaaat aaaca | aactac | aaatctacct | atgaaatccc | ttaagacatg | 300 |
| atgcataagc | cttataaagg tgct | tggtgc | attactgagc | ccaaaaagtt | ggtcttgaaa | 360 |
| gcgaattttc | actcatcacc cttt | tcatc | ctgatttcgg | gataaccact | tttaagaaca | 420 |
| atttttgaaa | aaatattggc a | | | | | 441 |

| <210> <211> <212> <213> | 6455 583 DNA Glycine ma | × | | | | |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| <223> <400> | unsure at 6455 | all n locat | ions | | | |
| ttagtctcta | tagatcttca | cacagcaaaa | tctctcaaaa | ctctctggaa | cttggacctt | 60 |
| tctctctcta | aaatctctag | acatgcaaag | ctctgaatcc | cagtccaaac | tccttatcta | 120 |
| aaatctgatt | tcaggcttaa | ataggtgacc | ttgttcgtgc | tcgtgcgctt | agcgcaattt | 180 |
| tggaccgctt | agcgcacatt | agtgaatttc | ggtttagcgc | gtgcctttgt | cgcttagcgg | 240 |
| atggactgaa | gcggtgcgct | tagtgagatg | aagcggtgcg | cttagcgaac | ctatacaact | 300 |
| catcttcttc | cagattcttc | cttgcgctta | gccaatgagt | gttacgctta | gtgggcgctc | 360 |
| gctaagccaa | tggactggct | tagccataag | gtgaaaaaca | acacttttaa | aagcttgcct | 420 |
| aattaacccg | aaattgtcag | acaatgatta | ttaaacacac | aaaatggaag | tactaagtat | 480 |
| ttattaccta | tacttaacat | anagtactta | taacactaca | aactaaccat | aaattgggga | 540 |
| agtttgatac | aatntacaca | ggttttacac | acaaaagtta | gtc | | 583 |
| <210> <211> <212> <213> | 6456 607 DNA Glycine max | x | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| agcttgtacc | acatttcatt | acatagagaa | gacaaatagc | aaactacacg | ttagccaccc | 60 |
| atgaaaatgg | agaagcaaca | taactttcag | ttaaatacca | ctatttgcta | gcttggctca | 120 |
| cttcctagaa | tacattgaca | aatactttaa | ttataagttg | atttatttta | tatagtaagt | 180 |
| tagcaaaaat | gcttgaaatg | gtgtaaggtt | gattaaaagg | agacaatgtg | tcaataaaat | 240 |
| ttctaaatct | agcttatctc | cactaaattt | ttggtgtttg | ccttgttaca | atagaaagtc | 300 |
| gtacagttga | acctgtttga | attttactaa | tccccaattg | tttaatgcaa | attattagaa | 360 |
| agttgatatt | aacagtgtga | taaatatgtg | atatttttac | caaggtctag | catgaatggt | 420 |
| aaataattga | gtcttgatta | tgtggatgaa | aaaagctttg | ttagtaaaaa | attacctact | 480 |

| ttggtgaatt | gtcttaaaag | ggaatagttt | tttataccct | ttatgcattc | caaaaagaga | 540 |
|----------------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| gtaatanttc | atcaatagaa | ttatagtcat | tgcaatcatt | tttcttaggg | tggttgaata | 600 |
| cttttt | | | | | | 607 |
| <210> <211> <212> <213> | 6457 522 DNA Glycine ma: | x | | | | |
| <400> | 6457 | | | | | |
| tatcaacact | tttatatata | acaattactg | gatttggttt | atgttgatga | aggtatatgg | 60 |
| tagcatatac | ttcagatcat | ctttcttcaa | gtgagtttga | accccaaccg | taggaaaggc | 120 |
| agtaaggcac | atgttgtgag | tctagaccac | tcacaagtat | tttagtcatg | tgatgagcaa | 180 |
| tttatgtagt | aacataataa | catgcgagtc | ttcaactaat | aagttttcaa | gctatgatta | 240 |
| tgaatttgct | ctcttccttt | ttgtttaatg | ctttctaatt | gtggtaagtg | tgtcataaag | 300 |
| tgttttgtta | taggaaagtt | aaaacaagtt | aattgttgac | aaaaaatatt | tttttaggca | 360 |
| caattaatta | cttatacaac | taataatgta | ataaattggt | gagtgtggtt | atgtttgcta | 420 |
| agtcaaccat | caaatctaat | ctgtgaataa | ctgaaaatga | atagaactta | tggcggtctt | 480 |
| tttagatatg | tcttgttttt | tagagcatgg | tgaggataga | tc . | | 522 |
| <210> <211> <212> <213> | 6458 381 DNA Glycine max | · · | | | | |
| <400> | 6458 | | | | | |
| agcțtgcttc | tacacttctc | cttgaagtgg | ggtctccaat | cacctttcct | ctgtctccat | 60 |
| tccactacca | ctgatcttca | agaagcaaag | gactccattg | atgaaggata | tccaaggcct | 120 |
| acaagttcta | catggagcta | cattatgtgg | tatcagagta | tcttcatcta | ggtgatcttt | 180 |
| tgcttactct | atcttttgtt | cgggcaattc | actttaattt | ctttttgttc | atcgtcttct | 240 |
| ccatgtatct | cctccattgt | ctagtggttt | ggtgttggtt | aaattacatt | caaaaaaata | 300 |
| aaatgatcaa | aacttagatc | tacacttgtt | cttgcatttc | catggggtcc | aacccatgcc | 360 |
| tcatcaatta | aggaatgctt | t | | | | 381 |

| <210> <211> <212> | 6459 677 DNA | | | | | |
|----------------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| <213> | Glycine ma | ıx | | | | |
| <223> <400> | unsure at 6459 | all n locat | ions | | | |
| tccatcaagt | ggtatcagat | cacaagagct | tcaagtaggt | gctccttaaa | cctccattaa | 60 |
| ttttcagctt | taccttttct | tccattgttg | tttcttcagt | tttttctcca | tgtatctcct | 120 |
| cacatttgtt | gtgctaaatg | ttgttaacat | gattttttag | aatttacacc | gattaaactt | 180 |
| gctatagaag | ctagatttga | ttttctatgg | ttcaaattcc | ttgttcttgt | tcttgaacca | 240 |
| tgaattgtgt | tgagtttaga | ttcctttgag | ttttgtattg | ccatttttt | ttgctgaaac | 300 |
| ctaaaccata | aaatacttac | aaaaacatta | aagtagaaga | aaacctcaaa | aatctagagt | 360 |
| gacatgttca | cctattatag | tgttgtctta | gaggtcatgc | ctagtcatga | aacttgtcac | 420 |
| ataagactcc | ttatgttntg | ttgaatttta | tttttcttga | ttctttatct | aactcatttg | 480 |
| ttcataagtg | tatgaaattt | ttttagccta | ttatttgatt | cgagtcaaat | cttgcatgtt | 540 |
| aattagtcct | taacatgtcc | atgcataatt | cttagagact | ctttgattgt | gaaccttttc | 600 |
| ttgactttta | nngttcctta | tgattgtgtc | tattgtacat | ttgangtttg | gtgattgaat | 660 |
| tgctggctga | attttga | | | | | 677 |
| <210> <211> <212> <213> | 6460 520 DNA Glycine mag | x | | | | |
| <400> | 6460 | | | | | |
| agcttcttga | tggattcaag | tacttgctat | gcgtgttact | ttataagcaa | tttcttatag | 60 |
| gatattgaaa | tcaatatata | tatatatata | tttgcggagt | gaaatacctg | tcctttttct | 120 |
| ttgaaattga | attgtttgtt | ttgcactttt | tcttttggct | aaatattctt | ctgtagttgg | 180 |
| catggcatga | cattgggttc | aaccattttt | tgctttcaga | atataatatt | gagacatctc | 240 |
| tgattaataa | tgctttcatt | cgtaaactac | aatgaaaaca | aaagccttcc | tatattgaca | 300 |
| tgtactcaac | gagatatttg | aatctgtagg | tgcaaagtga | tgaagtaccc | cattgtcagt | 360 |
| tttgtattaa | catcttcgtg | aagcatttat | ggtccactgt | cttatatttc | ttatttacaa | 420 |

| agttttgctt | ttgacctttt | ctctgatttc | actgaatctg | ttttccctta | tattgagacc | 480 |
|----------------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| caaagtattt | tttgggcata | tgttatcttt | ggttgattat | | | 520 |
| <210> <211> <212> <213> | 6461 692 DNA Glycine ma: | x | | | | |
| <400> | 6461 | | | | | |
| tgatgtgaga | aagcgtggaa | gagtcagtct | tcctactttt | gtttgttgac | cacagagtgg | 60 |
| tacctagaga | tatgtcgcgg | gggtcaggag | accttgggga | cgtcaggtgg | ggtgctattt | 120 |
| cccaaaacca | agcatgacca | atcccgaccc | aacccgggca | tagtcagtca | gtgagaactt | 180 |
| gtgacgtacc | taaacaggtg | agctcctggc | agtcaaccaa | taaaagaaca | aagaccacga | 240 |
| agcaaggagg | cttgtgtggc | ggctggtcag | ctatgaatct | tgagtggtat | ttggaaattg | 300 |
| gcctctggta | attgattacc | aagggtgtgt | aatcgattac | agggcttaga | aatggaaaca | 360 |
| ggaagttaaa | atggcctctg | gtaatcgatt | accaaggggg | tgtaatcgat | tacagggctt | 420 |
| aaaaatagag | acaggatgtt | aagatggcct. | ctggtaatcg | attacccatg | gtgtgtaatc | 480 |
| gattacatag | agtaataggg | cactggtaat | cgattaccag | ttaggtgtaa | tcgattacac | 540 |
| agtgtaattt | gtaggtttcc | atgtgcagaa | gctgtgtaac | tcgagttttg | ggcactggta | 600 |
| atcgattaca | tactttggta | atcgattacc | agagaggaaa | tcccttgaga | aggatatttt | 660 |
| gactatgcgt | aaccattatg | ggacgcattg | ta | | | 692 |
| <210> <211> <212> <213> | 6462 383 DNA Glycine max | ς. | | | | |
| <400> | 6462 | | | | | |
| agcttgatga | ttacctatgg | gcatatataa | caaccttcaa | aacacctatt | ggtctctcat | 60 |
| tgtttcaaat | ggtgtacata | aaagcatgcc | acctacaagt | ggagttagaa | ataaaagatc | 120 |
| attgaagttc | ctcaacttgg | actctgtggc | atccagagaa | aagatgaaag | tagagctaca | 180 |
| tggactttaa | gagatgtgcc | tcaatgcata | tgaatcatcc | aagctctaca | aagaaagctc | 240 |
| tacacagaga | attaaggatg | gaacaacaag | tattgctttg | caactcaaga | ttaaagttgt | 300 |

| ttcctagaaa | attaaaatca | agatggagtg | gtcctttaca | atcaaagact | ttaagcctta | 360 |
|----------------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| tggagatata | gagatagaag | act · | | | | 383 |
| <210><211><211><212><213> | 6463 541 DNA Glycine ma | x | | | | |
| <400> | 6463 | | | | | |
| ttcttccgtc | ggtgctcccc | tcatggggta | ccctagtttt | cttatagcga | gcgcgggatt | 60 |
| gtagttaata | caacccctcg | ttcctaccag | cggaatgttt | gtgtatcctc | cacatgagaa | 120 |
| aaggactcct | tectttectt | ccttccatcg | ggggaaccaa | ttgattgttc | tacctcctat | 180 |
| cccagccaaa | agctggtccc | aatctattct | cctcttttca | gtacacgaga | gatggctcag | 240 |
| gagcggacat | ggatgccttg | tgtcttgcag | gaacaagtgt | gaaaccaacc | aaacacagag | 300 |
| ggcgggcaag | caacagatga | tccgtgcgct | actcttttca | caccttcggt | caaatgtgtc | 360 |
| aaataaatct | gccaagacag | ctaccaccgg | actttccttg | ctatggtggt | atgcaaggaa | 420 |
| agcgtcgatt | gctgctaggt | ccaccaaacc | atccgcgttt | ggaaagagga | cgaccccaaa | 480 |
| aattaacaaa | gctaacacat | ccataaacgg | gacccaatct | ccttgattgg | ccatacccct | 540 |
| С | | | | | | 541 |
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| gcctcacaat | aaatttgttg | acatgaaata | aaaatgagta | ggcatttcac | tagaaaaact | 120 |
| tatgcataag | tttatgtgga | agcaaagcta | ccatgatgat | tcaccaagat | gttttgatga | 180 |
| tgccaaagct | caaagagttg | tttcaagatt | aaagaatcaa | gcattcaaga | ttccactcaa | 240 |
| agattcaaga | atcaaatgaa | gaaatcaaga | agcatcaagc | caagtcaaag | taagtagtaa | 300 |
| aaagtatttt | taaaaaaaaa | catcaaatag | cacacttttt | gttttaaaaa | ggattttctg | 360 |
| aaatcttcta | agttaccaga | gtttttactc | totogtaato | gattaccatt | taattataat | 420 |

| cgattaccaa | tgaccaggat | gggtttcaaa | ctggtttcag | tgctttacaa | cgttccaaaa | 480 |
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| tgattt | | | | | | 486 |
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| tctcttcgac | ctttggcaag | cctttaactc | gtctttcaag | atcatgcctt | tgacgaacga | 60 |
| ttgatccttt | cgtctctttg | gagcttaagc | tcactgctgc | tgccccataa | agctcctcgg | 120 |
| aacttgtttt | agccatgttc | ttcctttcgg | gccctcttgg | tttctcgttc | caaggcttcg | 180 |
| gcgatggcca | tattgatgtc | ccttagttca | tcatactctt | tccaaacttt | gatggccatt | 240 |
| gatttgaact | tctctttgac | tacttgggct | ttttcaagtt | ccgcctttag | ggtttgcact | 300 |
| tcctcactct | cctccagagt | tttagcctct | tcctctcttg | cagccttcag | ctttgggagc | 360 |
| caacccaact | cttatgttct | gactatcagc | cacttatgat | agtcgttggt | gatcccgttg | 420 |
| ctacttcccc | taagctcctt | atctttactt | tgtactgcac | ctcatgcctt | gcggactcct | 480 |
| tgaagtactc | tcgcattggg | gtcactaaaa | ccccgggcga | tgaaaggcgt | gatgctttcc | 540 |
| ttcaatggcg | ctcctctca | | | | | 559 |
| <210> <211> <212> <213> | 6466 451 DNA Glycine max | · · · | | | | |
| <400> | 6466 | • | | | | |
| agcttctaca | ttcaatttcg | agcttttcga | tatattacgg | gactcaatcg | gacatccgag | 60 |
| taaaaagtta | ttgtagtttg | aatttgctca | gggcttcggt | attccatttc | gagcgtctcg | 120 |
| atatattacg | ggactcaatc | ggacatccga | gtaaaaagtt | attgtcgttt | gaatttgctc | 180 |
| agagcttcgg | cattccattt | cgagcatttc | gatatattac | gggactcaat | cagacatccg | 240 |
| agtaaaaagt | tattgtcgtt | tcaatttgct | cagggcttcg | gtattccatt | tcgagcgtct | 300 |
| cgatgtatta | cgggactcaa | tcagacatcc | gagtaaaaag | ttattgtcgt | ttgaatttgc | 360 |
| tcacagette | tacattccat | ttcgagettt | togatatatt | acqqqactca | atcagacatc | 120 |

| cgagtaaaaa | gttattggcc | tttgaatttg | С | | | 451 |
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| <400> | 6467 | | | | | |
| ttgagcaaat | tcaaacgaca | ataactcttt | actcggatgt | ctgattgagt | cctgtaatat | 60 |
| atcgagacgc | tcgaaatgga | ataccgaagc | tctgagcaaa | tttaaacgac | gataaccttt | 120 |
| ttactcggat | gtctgattga | gtcccgtaat | atatcgagat | gctagaaatt | gaatgttgaa | 180 |
| gctctgatca | aattcaaacg | acgatgactt | tttactcgga | tgtccgattg | aggctcgtta | 240 |
| tatatcgaga | cgctcgaaat | ggaatatcga | agctctgagc | aaattcaaac | gataataact | 300 |
| ttctactcgg | atgtccgatt | gagtcccgta | atatatcgga | acgcttgaaa | ttgaatgttg | 360 |
| aagctctgag | ccaattctaa | cggcggtaag | tttttactcg | gatgtctgat | tgagtcccgt | 420 |
| aatatatcga | gatgctcgaa | atggaatgtt | gaaactctga | gcaaattcaa | acgacaataa | 480 |
| tcttttactc | ggatgtctga | tggaggcccg | caatatatc | | | 519 |
| <210> <211> <212> <213> | 6468 490 DNA Glycine max | κ | | | | |
| <400> | 6468 | | | | | |
| agcttgtagg | gttcacccca | aattccgttg | tcatatgcta | aacttgatcc | catatctact | 60 |
| tgataattca | atggtagcca | taaccctagc | caaggttcat | caacctccat | ttctccgaga | 120 |
| atacgactcg | aacgcaacgt | gtgcttgtca | cggagaagcc | ccggggcgtt | ccattgagca | 180 |
| ttgtaaggct | ctgaagcgta | aggtgcaagg | tctaattgat | acgggctggc | tgaaatttga | 240 |
| ggagaatcgc | ttgttgaatc | ctaacattaa | caagcaacac | catacatggg | gcaattctgg | 300 |
| aagctgttgt | tatgactcat | caggattttc | aagtttatgc | cataaaccac | agttacaatg | 360 |
| ttaaatgata | tagataaaat | ggacatcctc | tcacgaacac | atttttgctt | attcaacttc | 420 |
| caccggaatg | tgagtgtaag | ccattggtct | gtttgctcaa | gcaacctgca | ctcctgaatg | 480 |
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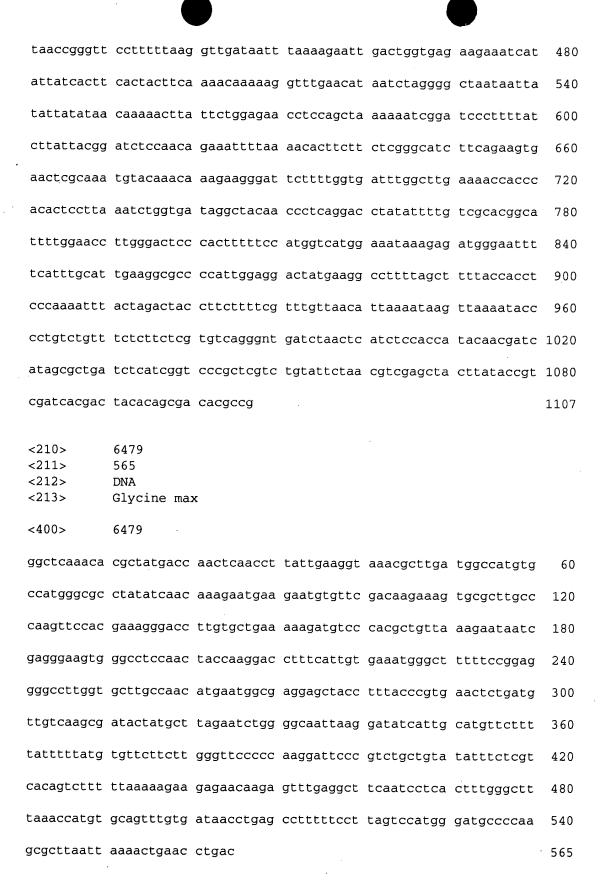
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| tctcccctat | tttgctataa | atagggggag | aagtgaagaa | gaaaagggtt | caacccctta | 60 |
| ggcacttctc | tctctctctc | gaatttgctg | aggaaaatta | . tttccgtgaa | gaaaatccaa | 120 |
| gccgaggcgc | ttccgtaacg | tttccgtgag | taattacgcg | aagagtctcg | accgttcttc | 180 |
| aaaattcatc | gttcgttctt | cattttcttc | aatcttcaac | gggtaagtac | ttcaaaccaa | 240 |
| gcttttccat | tcattctatg | tacccgtggt | ggťccaaatt | ttgtttcatg | tatttttatt | 300 |
| cttgttttca | tttacttttt | ataccccctt | ttgacgtgct | taagccattt | atttaagtca | 360 |
| tttctcgctt | aatctaaaaa | taaaactaac | ttccaccgat | cgtttgaatt | gtatcattcg | 420 |
| ttaattttgg | ttaaaatgaa | ttccgaccgt | tcggtcgtgc | cgtaaccacg | ttggaaataa | 480 |
| aaaaagaggt | aaaataataa | tataataata | aaaaatgtct | tttagtaaag | taaaagcgaa | 540 |
| aaaatcaatc | agacgttttc | tctttgggat | ttctgattct | taattgaatc | gactaataac | 600 |
| taaagtgaaa | ctaaggctaa | anatcactcg | cctagtcaag | ct | | 642 |
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| agcttgccac | ccagctcgcc | caggcgagca | gggttgcttc | ctccagaagc | aacagccttc | 60 |
| tggaggaatc | ttctgaaggg | cccaagtggg | cctggttgct | atttgcaccc | ccatttttac | 120 |
| taagtacacc | ccctgccttt | ttttggtgat | tctttttcg | taaagttacg | gaaacttacg | 180 |
| aattttgtaa | cgatacttgt | tttctttccg | taatgttacg | gaaccttgcg | gattacataa | 240 |
| tcatcccctt | ttttgactta | cggaatgtta | cggaacctca | ctaattgtgc | aacgatgctt | 300 |
| ccatttgatt | tccggtgtgt | cacggaacct | tacggattgt | gcatcaatat | tttcttttgt | 360 |
| tntccggcat | atcccggaat | ttcacaaatt | gcctaatgat | gggtgccaag | cacctcacaa | 420 |

| ggaccaaaca | ı aaagttgcat | gtcatcaago | aaaggtcccc | cggacgaaat | tagggtatga | 480 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| cagtngcccc | : tctttacttç | , tcttttattg | gagataaaaa | gggaagtaag | ataagaaccc | 540 |
| tatttcgttc | ctct | | | | | 554 |
| <210> <211> <212> <213> | 6471 618 DNA Glycine ma | × | | | | |
| <223> <400> | unsure at 6471 | all n locat | ions | | | |
| ttgctggtaa | aggtcttgaa | tgaagctcac | gtagcccaag | acatctccgt | agaaggcttt | 60 |
| gggggaatcg | tcaataacat | caaagccaac | aactacctca | ccttcgctga | agaggaaatc | 120 |
| cccgccgagg | ggagaggaca | taaccaggct | ttacatgtgt | cagtcaaatg | catggaacac | 180 |
| gttatggcca | aagtactcat | cgataacggc | tctagcttga | acgcgatgcc | caaaagcaca | 240 |
| ttggagaaat | tgccatttaa | ctcttcccat | ctaaggccaa | gttccatggt | ggtctgtgcc | 300 |
| ttcgacgaca | gccgccgaga | ggtaagggga | gagatcgacc | tcccagtaca | gatagggcct | 360 |
| catacctgcc | acgttacatt | ccaagcgatg | gatatcaacc | cagcctatag | ctgtcttttg | 420 |
| gggcgtccat | ggatccactc | agtgggagtt | gtcccctcca | cactccacca | aaagctgaag | 480 |
| tttgtagtgg | aaggacatat | ggtcatagta | tcacgtgagg | aagacgtcct | gntaagttgc | 540 |
| ccttcctcta | tgccatacgt | ggaageegeg | gaggagtcat | tataaacgac | tntccaatct | 600 |
| tttgaggtag | taagcatc | | | | | 618 |
| <210> <211> <212> <213> | 6472 482 DNA Glycine max | × | | | | |
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| agcttcccag | ttatggaaag | ctaaatcctc | tgtaggatct | tccttgtagg | tacttgatgt | 60 |
| aaatatctta | ttatctattt | aatgatgttt | tgtgtgttca | ctgtgctatc | agaacttcat | 120 |
| tctaccatgc | ttttaccttg | ctcacgtaga | tgcatgtgtc | cttaagatca | ttcaacagtg | 180 |
| gaaactggtt | tgatttttag | aacttgatag | gacaagacta | gtttatcgta | tttccatgag | 240 |

| gaatcggggt | acggtaacct | agttgttgta | tgtttgtctt | aattcggtcc | cggtcgagtt | 300 |
|----------------------------------|-----------------------------------|-------------------|------------|------------|--------------|-----|
| tagtccaaca | aaaggaatct | gcggacgata | ctttatcagg | attactagac | tatcatgagg | 360 |
| aatcgagatt | tagcatttca | ggagacacca | tagaacacat | aagcattgtt | atgtagaaaa | 420 |
| catcccttta | acaccaggca | cctactaaga | agaccaacgt | gatgtaagct | ccattggagc | 480 |
| tt | | · | | | | 482 |
| <210> <211> <212> <213> <223> | | x all n locat: | ions | | | |
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| | | | | cacttatgtg | | 60 |
| attgatcaaa | tcataaaaaa | gataagggta | aatagtcact | tttgtccttc | aatgtgtgat | 120 |
| tcgctaacaa | atacgtgtct | gaaagatgaa | aaaagtgcga | ctgntgtgtc | tagccgttct | 180 |
| catgtcgtgc | actagttaaa | tacaaaggcc | tcacaggcac | agtaaggaca | tatcctacta | 240 |
| ctaaaatgat | tgactactat | agactttata | tcacactgac | gtgatctgca | taggtacgaa | 300 |
| tggtaacaca | caccatacgt | tattatgaca | actctatctc | ttagctaggt | atctgatata | 360 |
| tagactca | | | · 60 | | | 368 |
| <210> <211> <212> <213> | 6474 565 DNA Glycine max | ζ | | | | |
| <400> | 6474 | | | | | |
| agcttttggt | acaaaagaag | aagaagaata | acttcaaaga | gatttcaagg | cttgtaaatg | 60 |
| attgtaagag | attgttagaa | agattgatta | aaaatgcaaa | acaaagcctt | acttttatag | 120 |
| actcttcatg | tatggtcaag | aaagccattc | agaagagtta | taacttttag | aaaaacttaa | 180 |
| aacccatttg | aaagggtcaa | aacctttttg | aagagttaca | tctttagatt | tttcagaaac | 240 |
| aacattggt | aatcgattac | caaataagtg | taattgatta | cacaaagatt | ttgagtgaaa | 300 |
| caatgtgact | cttcacattt | aaatttgaat | ttcaacgttc | aaggacactg | gtaatcaatt ' | 360 |
| accaaatcat | tgtaatcgat | tacagccttt | tgaaaatatt | tggaacgttg | taaattcagt | 420 |

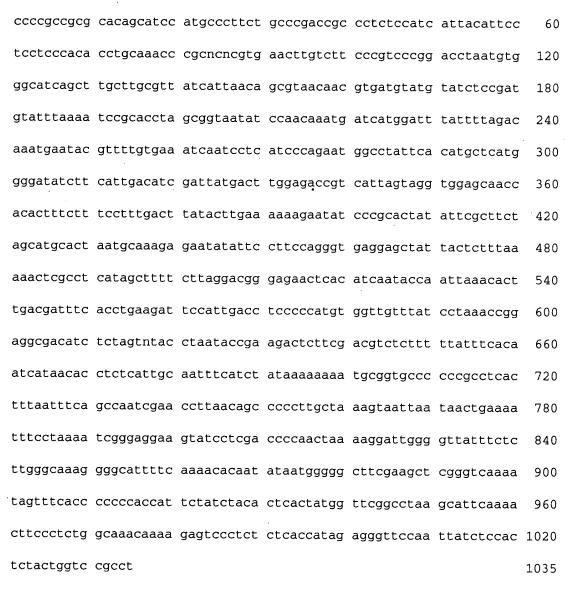
| ttgaaaactt | tttcaaactc | attttgctac | tggtaatcga | ttacaacaat | atggtaatcg | 480 |
|----------------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| attaccagaa | gagtaaaact | cttttgtaaa | ggtttttgtc | aaaactcatg | tactattcaa | 540 |
| aagttttgaa | aaccttttaa | tactt | | | | 565 |
| <210> <211> <212> <213> | 6475 486 DNA Glycine ma | x | | | | |
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| ttagaggtgc | tagtggaagt | agaaagaagt | tgattgtacc | ctttaattaa | atcttctcta | 60 |
| gatttgaata | ttacctcttc | accatcagag | ttgacagtgt | tatcaggcta | aggatgtatc | 120 |
| aaccattaga | cataggttgg | tttcttcctc | attgtcctta | tcagacaatg | aattatccaa | 180 |
| gtcctcccaa | gtgttcatga | ggcttttaga | tgcaatccta | ccccgcaagg | gcattggata | 240 |
| gaagactcca | agtttattgg | gccagagatc | caagggaagg | ccctanggtt | ctcatgagcc | 300 |
| ttanggtaga | tttcgagccc | atgggctaag | tatgagcccg | cttatctttg | taaatattag | 360 |
| aatagatttt | tcctttgctt | cgcgcccttg | tatttggcca | ttctagtaat | atagggcttt | 420 |
| aaccctgtat | ttcggggcat | tttgagtagt | ctttgtaaca | acgacttttn | ttgtttttca | 480 |
| tgtttt | | | | | | 486 |
| <210> <211> <212> <213> | 6476 494 DNA Glycine max | x | | | | |
| <400> | 6476 | | | | | |
| agcttgtcga | agaacatgca | tgatataatt | ataaaacatg | tatatctgtc | tcccaagaag | 60 |
| ccattcaaat | tcaaagtggc | tgaggctagc | ttttgcttat | tgttgttgca | tgcatgaata | 120 |
| actagctata | tattgtaagt | taccaattac | cacgtatatg | ttggctatgc | aatactatat | 180 |
| tatcagttat | cacgatcata | aagtactacg | aatgatgcac | ggtaacacgt | ttggataaaa | 240 |
| tttctgtgca | ctggtttcca | tgaatatcta | actaacgtgg | gatgttttcc | tcgaacaatt | 300 |
| tttttttgg | gtacgtaata | gtaacattta | gtttttttt | tctttttttg | atttaatacg | 360 |

| agatccatag | tatccgaatg | ttaaattaga | ctggatcaac | tgagggtaat | attacttatt | 420 |
|----------------------------------|------------------------------------|--------------|------------|------------|------------|-----|
| ctttctttc | atattggtaa | gtataacctt | tttaatataa | atttaattct | tttgagcata | 480 |
| aaatgaaatg | aatg | | | | | 494 |
| <210><211><212><213> | 6477 470 DNA Glycine ma: | x | | | | |
| <223> <400> | unsure at 6 | all n locat | ions | | | |
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| gttgccccaa | actcgcagca | cttgagtttt | aaaatcgttc | agaagtataa | ttgcttgcaa | 120 |
| aaatgcagcc | ttcgggctct | tgaggcttga | agtgagagaa | ataaaaattc | tagttgttaa | 180 |
| ggaactcatg | gttagcgatc | aattctctga | tgatgatact | catcacatga | atatctatct | 240 |
| tgagaggatc | aaagttttgg | agcagtgaaa | attcaacctc | taaggagtgt | gtcgctgaga | 300 |
| ttttttttt | ttttttacaa | tatgcttgca | attaattagt | ttgtgttcaa | tcacaaattg | 360 |
| gcttttatgt | aaattattgt | gatattcact | tntccatttt | gaaaaacttt | ttatgctgtc | 420 |
| ctaaaaaatc | tttaattcta | tgagatataa | atacattgtt | ataaatagca | | 470 |
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| <223> <400> | 6478 | all n locati | ons | | | |
| tgcgggttcc | tcgtatacgc | tctagcatac | accctgacca | ccctccgtta | cacantnnta | 60 |
| tnacgatatt | tctcgtcata | acacctatta | ttaatatatt | cctgtaatat | accencece | 120 |
| nnaannnncc | acgattgaga | ccatggcaga | accggggatc | ctctanaaga | cgactcgcag | 180 |
| gcatgccaac | ctgcaggctc | gttaaaagaa | gaaaactttg | ctataaaaag | ttatccacca | 240 |
| cacgaatcaa | aacactgagg | gcacttattt | taaaaactaa | caagcctcta | aaatatattt | 300 |
| ttaaaatatt | tccataaact | tatttaattt | tctggctcag | aaatccctaa | ataaatcttt | 360 |
| ttggtcgtat | tcgcaatttc | cttatatatt | aaaatttgct | ctcggagtgt | ttaatccgta | 420 |



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| <211> <212> <213> | 476 DNA Glycine ma | x | | | | |
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| cttacaagtt | tgatatcaaa | caaaatcggt | ctctattaca | ttcacttcct | acctcaataa | 60 |
| ctgttttgac | tcaactttgt | tctactaatc | aacttcagct | ttgtgagcca | tattaatgcc | 120 |
| aatctatatg | ttcaaggagc | atgacattaa | tgtaaatgca | aagattcatt | gaccctcacc | 180 |
| tttgttcctt | tcaaaaattc | agttgccttt | ggtgatggca | tttgaattac | cttccattcc | 240 |
| aagccatggc | tccactagca | cagatctatt | tgttattgct | gtctccatct | tgttagtgtt | 300 |
| atttggctca | ctttgttatt | gcttggtaac | tcgcaagtcc | aagggaacat | attacaatga | 360 |
| caagccatca | aaaagctctg | ttacttgtag | agtgttcaca | ttccaagaag | tccaaaaagc | 420 |
| aaccaacaac | tttcaagaag | attttcttt | tggcatttgg | gggtttggga | atgtct | 476 |
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| -100- | | | | | | |
| <400> | 6481 | : | | | | |
| | | atatgtgtac | aaagagaatg | ggagactaag | catcaaaaaa | 60 |
| gaggtccgag | tgtgcaatga | | | ggagactaag ttttctaata | | 60 120 |
| gaggtccgag agaaggtgca | tgtgcaatga tgagaatgat | gagataaatt | tcaaagacaa | | aaactgtctt | |
| gaggtccgag agaaggtgca tgaatactta | tgtgcaatga tgagaatgat atttctaaga | gagataaatt taatttttat | tcaaagacaa | ttttctaata | aaactgtctt aactatagaa | 120 |
| gaggtccgag agaaggtgca tgaatactta gcaaagcttc | tgtgcaatga tgagaatgat atttctaaga atggggaatc | gagataaatt taatttttat aaaggtgatt | tcaaagacaa aaaaccgccc caaaggtgtt | ttttctaata ttggatatat | aaactgtctt aactatagaa ccatgatgat | 120 180 |
| gaggtccgag agaaggtgca tgaatactta gcaaagcttc tacacaagat | tgtgcaatga tgagaatgat atttctaaga atggggaatc gatgactcag | gagataaatt taatttttat aaaggtgatt gtgatgacaa | tcaaagacaa aaaaccgccc caaaggtgtt aaagctcaaa | ttttctaata ttggatatat ttgatgataa | aaactgtctt aactatagaa ccatgatgat agaaagcctt | 120 180 240 |
| gaggtccgag agaaggtgca tgaatactta gcaaagcttc tacacaagat aagtgaatca | tgtgcaatga tgagaatgat atttctaaga atggggaatc gatgactcag aagatcaatc | gagataaatt taattttat aaaggtgatt gtgatgacaa aaagaaccac | tcaaagacaa aaaaccgccc caaaggtgtt aaagctcaaa cttatgtgaa | ttttctaata ttggatatat ttgatgataa gatcaatcac | aaactgtctt aactatagaa ccatgatgat agaaagcctt ttcaagagtt | 120 180 240 300 |
| gaggtccgag agaaggtgca tgaatactta gcaaagcttc tacacaagat aagtgaatca caagataaga | tgtgcaatga tgagaatgat atttctaaga atggggaatc gatgactcag aagatcaatc atcaggaaga | gagataaatt taattttat aaaggtgatt gtgatgacaa aaagaaccac | tcaaagacaa aaaaccgccc caaaggtgtt aaagctcaaa cttatgtgaa caagaagaaa | ttttctaata ttggatatat ttgatgataa gatcaatcac tcaagaacaa gtctaaagtc | aaactgtctt aactatagaa ccatgatgat agaaagcctt ttcaagagtt | 120 180 240 300 360 |
| gaggtccgag agaaggtgca tgaatactta gcaaagcttc tacacaagat aagtgaatca caagataaga attcaaggtt <210> <211> <212> <213> | tgtgcaatga tgagaatgat atttctaaga atggggaatc gatgactcag aagatcaatc atcaggaaga caagatgtca 6482 1035 DNA Glycine max | gagataaatt taattttat aaaggtgatt gtgatgacaa aaagaaccac attttatact agaattcata | tcaaagacaa aaaaccgccc caaaggtgtt aaagctcaaa cttatgtgaa caagaagaaa tcaggattca | ttttctaata ttggatatat ttgatgataa gatcaatcac tcaagaacaa gtctaaagtc | aaactgtctt aactatagaa ccatgatgat agaaagcctt ttcaagagtt | 120 180 240 300 360 420 |



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<212> DNA

<213> Glycine max

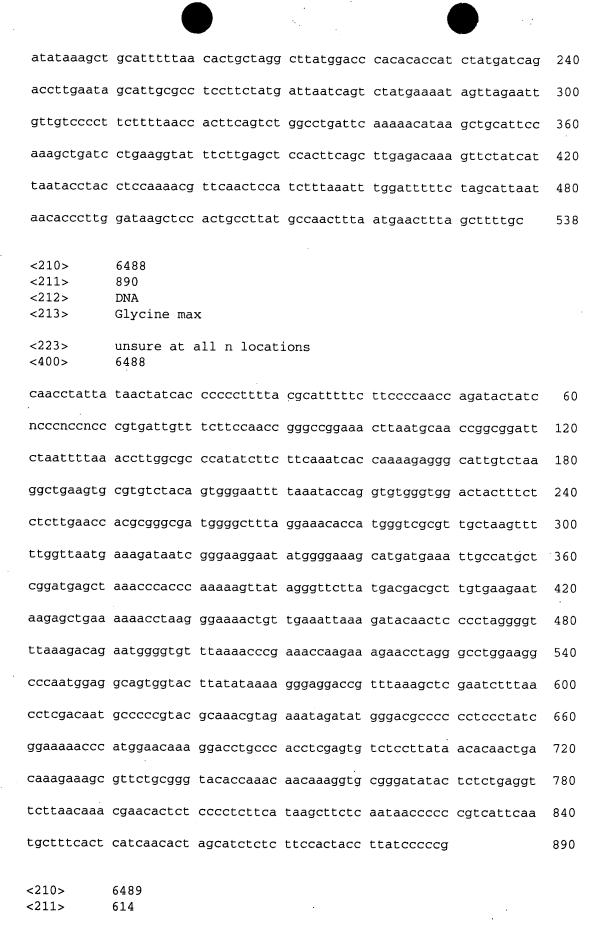
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<400> 6483

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| tcctgcatcc | tccaatatca | aatcttattc | cgagccccat | gaattgattg | gcgttcatgc | 300 |
|----------------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| atccttccca | ttgagtcccg | aaccatacca | attgactgcc | cagctccgga | tatgcctacc | 360 |
| ttatcaataa | aatctattcg | aagccccatg | aattgaatgg | cattcctgga | tcccccacc | 420 |
| attgaaactg | gaacccgccc | aaatggatgg | ctaatggtgg | tccggccatc | tccaccaatc | 480 |
| tattgttacc | ccatgaaatg | aatgtggtaa | cgcattcctc | acctttgagt | tcagagcctt | 540 |
| acgaaatgac | tgccgcgctc | tggagatgcc | tcctctataa | ttaaatctta | atccaagccc | 600 |
| catgaaaaaa | tggcacttaa | tgcatgcccc | tccattgagg | ccagagccca | ccaattgatt | 660 |
| gccaaacgct | gttcgcgcat | ccttcacaat | ttattccgga | ccccctaaca | tggtggggat | 720 |
| taatgaatcc | tacccccttg | attctcaaat | cccacaaatt | gatggcttgg | ccttgtgcag | 780 |
| ccattcctca | ttaaaaactc | taatctagcc | cctgaattat | ttgcctttgt | ggcctctccg | 840 |
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| tatatggcta | cacctttgag | catgatgtat | ttatttttt | aacttggggt | tattttttta | 120 |
| attttactat | gttagcaagt | tttgttgttc | ttgattgatg | cccctttggc | accttatgaa | 180 |
| ttcttgtatt | ataattggca | caacctacct | tacgacagga | tggcgaagac | caaataaata | 240 |
| agccaaagcg | ttcgtcttca | agggaaaaaa | tgaacggagt | ccccaccaac | gtttattcga | 300 |
| gaaaaaaatg | ttagaaaaac | ccaaaagaca | tctatgaatt | ttgaaaataa | aggtttgcga | 360 |
| gttgtttaca | ca | | | | | 372 |
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| agctttaagg | aaaattaata | tgggattgtg | ctataattta | aattattaac | ttattgtaat | 60 |
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| ttaatttatt | ttggtgggaa | atggcactat | gacataacca | tggaactcat | cccacttcct | 120 |
| tcaaacttct | atccctcttt | cttttcttt | tttgaaactt | ctcctttgtg | gttgagtttg | 180 |
| atctatgttt | tttctcatat | ctatcccaag | tcacaggtaa | gttagttttt | ccactcacta | 240 |
| ctaaaaaata | tacatttaac | atcggcaggt | taacatcggt | ttccgaaaaa | accgatgtta | 300 |
| acaaaagcac | ggtggcatac | ttgtaattaa | gattagttta | ttaacatcgg | ttttatacaa | 360 |
| aaccgatgtt | aacacaaatg | ccgtggcaat | gttaacatcg | gtttttaaa | taacccgatg | 420 |
| ttaacattcc | ctaattaaca | tcagttttt | aa | | | 452 |
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| tatggcaatt | aaaatatatt | aaatgttctt | gtatgttgac | atgggtaata | agatactttc | 120 |
| tacacatgcg | cgtgtgcata | aatggattac | atgagtttgg | tctaaatcaa | aggggctagc | 180 |
| acgacatttt | tgcgttaata | taagcattat | cttgtaaaac | taacttctaa | atgtttgttc | 240 |
| tcgcaggaaa | tggccccgag | gaaacttgcc | tcaaagagat | ccaggaagga | taaagcggcc | 300 |
| gaaggaacta | gttctgctcc | cgagtatgat | agtcaccgct | ttaggagcgc | tgaacaccaa | 360 |
| cagcgcttta | aggccatcaa | gggatggtca | tttctccgga | acgacgcgtc | caacttaggg | 420 |
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| | | atgatatget | atananat | | | |
| | | atgatatgct | | | | 60 |
| | | gaaaaaggct | | | | 120 |
| ccgaacacca | tctaaggttg | gcctattaaa | attctcctca | gaaaatctgt | ctttgaaatg | 180 |



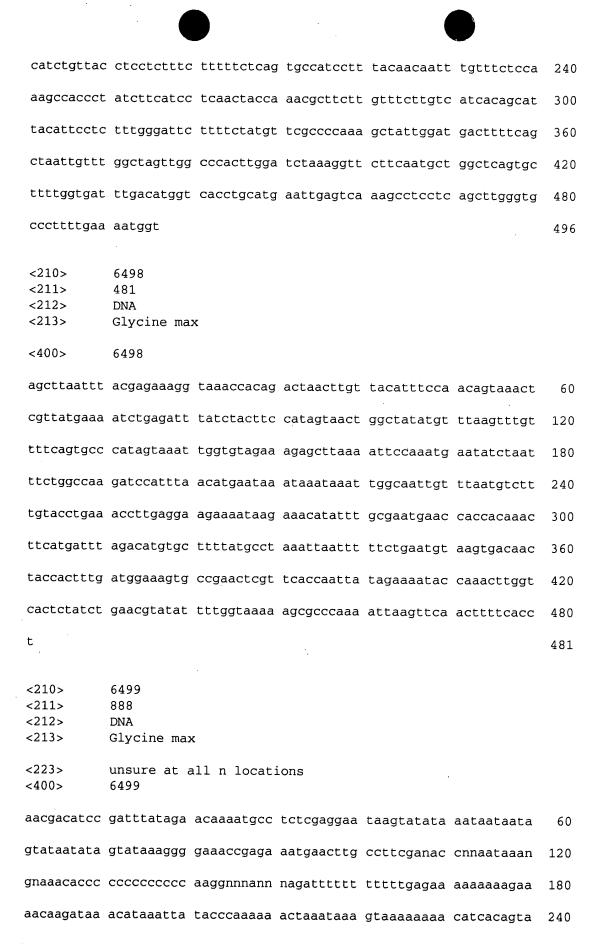
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| atgaatgaag | ctctcctacc | acctaagaca | aggtagaagg | •agataaactg | tacaggatca | 120 |
| aagttcaatc | aaacaatcat | actttcagct | taaaatgggt | gcaagggata | aatcaatcat | 180 |
| gcaccaggta | agctttttag | ctaagtggct | ctcttcaatc | aaaatatggc | cttcatcatc | 240 |
| ttcaatttca | cgcattcatt | ccatactcaa | agattcatgc | aaaaatcatt | actcaatgtt | 300 |
| agtcgttctc | tcataattaa | agatcacact | ctcaccaggt | tgtggctaat | gagtaccttc | 360 |
| acaatcaaac | tgtcaaactg | actaacattt | tcagtcatga | tcctaatcaa | tgttctttct | 420 |
| tctttaatga | ctgcacactt | cattcaaaca | tatgatttac | gcattccaaa | ttcactcaaa | 480 |
| tcacgccatt | gatcacttca | aaccaattac | aaacacttga | atgccaaaat | caagtttcaa | 540 |
| ccactggtcc | attcaagctt | tgtacaagct | atcaacccaa | attaaaaatt | taacctaaaa | 600 |
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| <211> <212> <213> <400> agcttaaaag aacgcttgat acaagaaggt acgctgttaa aatgggcttt tacccgtgaa tatcattgca | 455 DNA Glycine max 6490 aatcagaggg ggccatgtgc gcgcttgcgc agataatcga ttccggaggg ctctgatgtt tgttcttta | gctcaaacac catgggcgcc aagttccacc gggaagtggg gccttggtgc ggcaagcgat | tatatcaaca aaggggacct cctcgaacta ttgccaacat actatgctta gtcttcttgg | aagaatgaag tgtgctgaaa cgaaagacct gaatggcgag gaatctgggg | aatgtgttcg aagatgtccc ttcattgtga gagctacctt caattaaaga | 120 180 240 300 360 |

| <212> <213> | DNA Glycine ma | x | | | | |
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| aaaaaagaca | ggaagcgggc | aaacagggaa | gacgaagggg | aaggtggaga | ttttggggag | 180 |
| cggacagaaa | aaaaagaacg | gggggggagt | gtttgatagg | ggaaagaacg | acccccctaa | 240 |
| agaaagaggg | gcgcgggaga | acaaaacaca | cggagggag | agggcgaacg | gaataaagca | 300 |
| cacgaaagaa | agggggagaa | aggagggcgg | cggcggaacg | gaggaaggaa | aaggacggaa | 360 |
| agaaggagaa | aaaaggagca | gcgacgggcg | caacggcgca | agcgaaaatt | aatagaaaaa | 420 |
| gagaaaggag | acgcggaaag | aagaaaagga | aagggaagag | aaaaaagga | aaacgggggg | 480 |
| gggggagaca | aaaaaggcaa | aaagaagggg | acagaggaca | gaacaacaga | aaagcaaagg | 540 |
| caaagcaggg | gcggggggac | gaaagacagg | aacaccagaa | aagagcgcaa | cggaaaaacg | 600 |
| aaaaaaaac | ggagaggggg | gaaagggagg | aacagagaag | aacgaacacg | agaaggaggc | 660 |
| ggacgagagg | gaagcagggg | aggaacgggg | ggaaaagaag | aaaggggcaa | aaggaaagaa | 720 |
| gcagacggca | acgcggggac | gaggcgggag | aagcgagggg | agcgcaagag | gggaaacaca | 780 |
| gaagggaggg | aggccggcga | caggggtggg | aaaatagggg | acgaacaagg | ggaaaaaaag | 840 |
| ggagaccaaa | gacggagtga | acaaaagaga | gaggagggaa | aagggacaaa | aggaagggga | 900 |
| gagagaaggg | agcaagaggg | ggagaagggg | gaaagaaaag | aaaaagacag | ggaagagagg | 960 |
| agcggacgag | aaaaaagggg | gaaaaagagg | agagaaaggg | gaaagagcaa | aaag | 1014 |
| <210> <211> <212> <213> | 6492 792 DNA Glycine max | S | · | | | |
| <223> <400> | unsure at a | all n locati | lons | | | |
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| aacgaatatt | tgactaaaga | anacggnnag | tgaactgtct | cccgaccaaa | ataaagagaa | 120 |
| caacagacga | acaaccccag | gaattttcat | tttggaaaaa | acgagcaggg | acaaccgata | 180 |

| aaaagaggtc | caccagaaac | acaaggaaag | gaagaacggc | acagggaaag | gatatagaag | 240 |
|---|-----------------------------------|------------|------------|------------|------------|-----|
| ataaaacatt | aaggggatgg | ggacacgaaa | cacaaatttg | cacaaggaga | ttttatcaca | 300 |
| acaccatctt | aaaaagaaga | gggggtcaaa | aggacaataa | cagaatctaa | aaaccaaaag | 360 |
| aaaaggagca | aagaaataac | caagaaatcc | gcctgggaaa | attaagaaac | cagcccaaca | 420 |
| agagggggaa | tgattactgt | ataaacgaac | agcgaccgac | aaaaattatg | gaatgaacga | 480 |
| agcaaggggg | tcttgtaaag | gactgggcac | caataaaaaa | aaggataaca | cctccaataa | 540 |
| ttgaaaatgg | caaagatagt | taaaacatac | aaacacggaa | ggcgaaacga | caaaatcaag | 600 |
| gaaaataaaa | tccgaaaaca | tctcctccct | ctaaaaaaca | tcaaattaga | aagtaaagcc | 660 |
| taaaaaaaga | aagataaaag | agggaaaaac | aaaactcgtt | aaacatacac | aaacggttac | 720 |
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| gacaaagcaa | cg | | | | | 792 |
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| ttattattgc | atgcttgtgg | cttgatcacc | catatgtgtg | tactgttagg | ggctttagca | 120 |
| tggaaagatg | tattgtctcc | ttaaaacttg | atagagcagg | attaggttat | cgtatttctg | 180 |
| gacacggagt | gcggtaattt | agtttttatt | atgctatgat | cataaagctg | ttcaattaaa | 240 |
| ctaagttcaa | taagagacat | ctgtgaacga | agtttaatta | gaattaggct | aaactcatga | 300 |
| gacatcggtg | tttagtactt | gagccttcaa | catagaacac | aaaaacatct | ttaattagag | 360 |
| aaacatcctt | aattgcatca | atttgctcag | taagaggacc | caacaccttt | aaatatttgt | 420 |
| tttcacactt | gctcacattt | aaggcttttg | taattagaat | agaacatact | tttactttta | 480 |
| ttcacaat | | | | | | 488 |
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| tctcggtttg | tttacttttt | atgccccctg | ttgacgtgct | taagccattt | tacttaagtc | 120 |
| gtttctcgct | taacttaaaa | ataaaataaa | tttccaccga | acgtttgaat | tgtattatcc | 180 |
| attaactttg | gtcaaaatca | attccgaccg | ttcggtcgtg | ccgtaaccac | gttggaaatc | 240 |
| aaaaagaggt | aaaaaataat | ataattattc | aaaagacatc | ttttagtaaa | ataaagccga | 300 |
| aaatcaatca | gacgttttct | ctttgggaat | tctcattctt | aatcgaattg | attaataact | 360 |
| aaagtgaaac | taaggctaaa | atcaactcgc | ctagtcaagc | tcgtccacaa | aaataagctt | 420 |
| ttgaagattg | tcatttcaat | ttttcactaa | gtaaaatggg | tcatttttaa | agtccaacgc | 480 |
| tttaaaagat | caccccttaa | aaccaaaaag | aatcacttga | tt | | 522 |
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| gtcaacgttt | ttacaggaaa | cgatggtcca | ttaaaaagct | gaccctgaaa | atatatcacc | 120 |
| gtcaagtata | gtattctgaa | tatgccattt | tttatgaaga' | gatgatattt | atctgaatga | 180 |
| taagtatcat | cttactctgt | aaacagctcc | caacccgcct | tgtccaagtt | tattaaaatc | 240 |
| agcgaattca | tttgtagcag | ctcgaatggt | atcaaaattg | aattgcaatg | actcaccaaa | 300 |
| tgtaatttca | tcttcgggac | tatcttctcc | tttaacctca | cctgaatggg | gacccccctg | 360 |
| aaattatgtg | agctattcaa | aatataacat | tgagagatat | tatttctcat | atacaaaccc | 420 |
| agaaggaaat | ggctaaattg | gcttcctccg | ctatcttttt | tttattctta | gctataagtg | 480 |
| aatgagtaaa | gcatgcgttc | aa | | 34 | | 502 |
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| atagctcnng | gagaccaaac | tgcngcatac | aacgacaact | agtgacaaca | ancnntcaag | 120 |
| gcnncnacna | cgagggttga | aatcgatggt | ggaacgcatc | tggaaangga | ggctaataaa | 180 |
| ataaaccccc | acggcaactc | aacaacgaac | aaaaaggaga | gaagatctct | gattttatta | 240 |
| tatatacaac | gcgccaaaga | agagggggag | agatttttt | atacccacca | ccaccaccgc | 300 |
| ccggaccgcg | gaagaggagc | gtggagaaga | cggaacagga | tagcgagccg | gcgacacaaa | 360 |
| gaaacaaaat | ggcgagaagc | acgaaatgcg | tagcgccgga | cggaacgaac | gggaagaggg | 420 |
| cgaaccagga | cgccgaacaa | ggagcgacaa | ccaggcggcg | ggggaacaga | agagagaaca | 480 |
| agagagccga | acgggaaạtg | agaagacgcc | gaagggagaa | aaggagaaga | gaaaggggaa | 540 |
| caggaaagcg | aagaccggga | caagaagaga | gggcaaagga | gaggagcaaa | agggaggcgc | 600 |
| aaacacgaac | ggagacgcag | atggaagagc | aagaggcgac | gaacacagag | gaacaatgac | 660 |
| gaagggaggg | gaaagggaga | gatgaaggac | agataacaac | gatgcgggaa | ggacgacgcg | 720 |
| gacgaagacg | acaggacacc | gaggagaggc | aaagagggag | cgaacagaga | cgcgcgcaag | 780 |
| gaagagaaga | ggaaacagag | ggaaggtgaa | acgggagacg | ggggaaagcg | gaaacggggg | 840 |
| agtagcgcag | aacgggagag | atgaaacccg | agcaaaggga | gacgagaagg | ggaagtggcg | 900 |
| accagaggca | gaggacgagc | acggcagggg | acaaaacggc | gaagaggaca | agaaccgatg | 960 |
| cgacgggacc | agaaaggacg | acacgagcga | ggaaggacgc | gagcgacggg | aaaaaacacc | 1020 |
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| g | | | | | | 1081 |
| <211> · · · · · · · · · · · · · · · · · · | 6497 496 DNA Glycine max | : | | | | - |
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| | | | | ctcttttctt | | 60 |
| attttattaa | actttttctt | tttcttcatt | ttctttcttt | ttctacctct | atttctttt | 120 |
| cttggtcatt | tatttctttc | tccacgacca | ttattggttt | ttcactctcc | tgacttgtca | 180 |



| aagacaataa | aactataatt | aacaaaaaa | aaaaatcaac | aatctaggaa | tttacaaaaa | 300 |
|---|---|---|--|--|--|---------------------------------|
| atataaaaca | gaaaaagctt | ataaataata | aaaaaaatat | taaaaacaaa | atgtggtatc | 360 |
| aaaaccacaa | aacattaaaa | aaaactactt | aaccaataaa | ttattaatta | tacaaaaata | 420 |
| aaattacatg | aaagaaaaac | aattaaaata | atttaaacag | aagaaaaaga | aaaaagaact | 480 |
| aaattgcata | cataacacaa | aacacttaaa | atcatctaaa | acgaaataca | acaaacaaat | 540 |
| cacacaagaa | atagaagaaa | aaaaaaataa | ataaaagcaa | aaaatcgaat | ttcacaaaac | 600 |
| atataaagag | cataaataaa | acaaaaatga | aatagacgaa | taaatggaaa | aaaaataatt | 660 |
| aaagattttt | tgttgtataa | aaaaaagccc | ccctggagtt | ataaaaaaaa | aaaacaccaa | 720 |
| acaacaccca | caacacaaag | agagaagaaa | aaaataatta | aaaaaagtgt | atggtggngg | 780 |
| ttnnnnnnn | nnnnntnnn | ntattattat | aaggtgtaaa | taaattanga | acatccatac | 840 |
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| atagaaaaac | ggaagacgaa | gaatacaaaa | aagaacacga | gaaatcaaat | gggagaaaag | 60 |
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| aagttccana | aacnccccaa | agggatggac | gagatgaacc | ntatgaaaac | cnaannaana | 120 |
| ggaagaacaa | aaggaaaaac | aacaagaaag | gagataggga | aaagagaaaa | aggagaggaa | 180 |
| agggagggg | gggaggagaa | gaagagagca | aaaaagaaaa | ggagaagaag | aggggaagaa | 240 |
| agagagaaaa | agaggagaag | agaagaggga | ggaaaaaaag | aagaggaaga | gaaaaagagg | 300 |
| aaaaacgaga | ggagaagaga | agaaagagga | aaaaagagga | aagaagagga | aaaacgaaag | 360 |
| aaaaagggaa | ggaggagagg | ggggaagagg | ggaaaagaaa | ggaaagaaag | agggacaaca | 420 |
| ggcaagagga | aaagagagga | aagagagaag | agggaagggg | aagagaaagg | aaagaaaaga | 480 |
| aaaggaagag | ggaagagaag | agagaaagag | gaacagggaa | gaggagggag | gaggagaaga | 540 |
| agcaaaggag | agacgggaaa | agaagagagc | ggcagggaaa | aagaaaggaa | aaagaagaag | 600 |
| ggaacgaaag | agaagaaagg | acgaaagaga | gagagaggaa | gaaagaaaga | aaggaggaga | 660 |
| gagaaaaaag | gacagaggaa | ggagagaaaa | aggaaaaaga | ggagatggga | gaggagaaga | 720 |
| agagcaaaca | gaaaaggaag | aaacaataga | gagagagagg | ggaaagagag | gaacggggaa | 780 |
| aagaagaaga | aagagggagg | agggaagaaa | agacggcgag | aagcagaaaa | acggagaggg | 840 |
| gcgaaaggag | agagaagaga | gaaggaaagt | acgagaaaga | gggggaggaa | aaaagagaga | 900 |
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| ttaacaactt | ccgtttgccc | atcggtttgg | gggtgacaag | tggttgaaaa | taacaattta | 120 |
| atgcccaact | tgctccacaa | agtcctccaa | aaacgcaaat | catcaagcct | aagtatagga | 180 |
| tgcctatatt | taatggtgat | gttattaagg | gctctacaat | cagaacaaat | gtgccatgtc | 240 |
| ccatcctttt | tagggaccaa | aatcactggg | acagcacaag | gactcatact | atctcttacc | 300 |
| caacctttgc | taatgaattc | atccacttgt | ctttgaatct | ctttggtttc | ttttgaatta | 360 |
| cttctatagg | ctggcctatt | gggcaaagaa | gctcccggaa | tgagatcaat | ttgatgctca | 420 |

| attececete | aaggaggtag | tccacttggc | acatttggtg | gaaacatgto | atgaaaatcc | 480 |
|-------------------------|------------------------------------|--------------|------------|------------|------------|-----|
| tgcaaaagaa | ttttaacact | agaaagcact | taaaatcatc | aaaagtgtta | ggggcaaaat | 540 |
| ctgatttttg | cataacaaga | tatagaacga | ctgtttaaca | ccaaacaacc | ctcttgacct | 600 |
| cactttttgt | gggttaatac | ctctccctca | ctctaagggt | tccccctttc | ttttggaccc | 660 |
| tctttttccc | tcccagtggt | tccctca | | | | 687 |
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| gataagctct | ttctgcctct | cccacttctc | gcttggcaca | agcacaatga | tccaaccaaa | 120 |
| tccccaacac | ttgcttggaa | atggggtcca | aatggtccct | gatgatctcc | tccatgcgtt | 180 |
| ccactccgcc | attttccgtc | agaacgcgaa | ccattatggc | tgtaggagaa | gaaacagtgc | 240 |
| ggatgtaaag | ggaagaagaa | aagtatggtt | gaacctctgg | aactctctcc | agagtctgcc | 300 |
| tatgtttgtc | tagttgagtg | tcctcataga | aagttttgag | gtcatctggc | caaagcacat | 360 |
| ggtctttccg | gggaggccaa | tcaagaatga | gaagtagcat | tgttggacta | ctggggatca | 420 |
| tttcaaacac | aaaattt | | | | | 437 |
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| caggacccac | acataacccg | gccccccgcg | gccaatgggc | cgtgaccacg | ccnnncnnan | 120 |
| aaaaaaacca | agggagaagc | gacgccgacc | gccccgaacg | cggacgcatc | agaaccaccg | 180 |
| cagacccgaa | caacgagggg | acgacagaca | accacaccac | ccccaccac | ccccaagaaa | 240 |
| aaagggacag | acgacagcgg | cgaaaaagac | acagcagaca | acgaggacga | ccggccccag | 300 |
| gcagagagca | cgaacgcgca | cgcgccaggg | cgcgagaaag | gagcaaacag | ggggcacgca | 360 |

| gaagcaccaa | gcccggcgac | aacacacgac | ccaaaacacc | : gaccaaaacg | acacaccggc | 420 |
|---|--|-------------------|------------|--------------|------------|------|
| ggcgggggcc | gcgcagagcc | gagctcagca | ccacgaccgc | cacaacagac | aagcgccgcc | 480 |
| acacccacaa | cacacggaac | aagacgcccc | aacggtcgaa | acaacgacac | acagaccgcg | 540 |
| gccacaaggc | accagggcat | cgacgacgca | atcggcacga | gagacaggac | caagcacaag | 600 |
| ccacaccacc | agcgaccaca | gcgccaaacg | acccccaaca | gcaagacacc | cgccaacgcc | 660 |
| aacgcgcggc | acacccgcgc | cagaacccga | acccgggcag | cacacgcacg | aaacgaccga | 720 |
| cagcgaccac | gcgaccgcca | agtcagcgcc | gcacagcgac | cccacaccga | cccagaacga | 780 |
| caccaacgca | ggaagcggcg | aacggaaaca | agaaaggcgc | gggcagacga | ccgggcgcaa | 840 |
| gccggaccga | gaggaccggc | gcacaacggc | gcgaccgaac | gcagaacaca | agagagcagc | 900 |
| gagcaagagg | acggacacca | cggagcggaa | agcaagacgc | gacacaacag | accaagacgc | 960 |
| aacacgaacg | anaccacgag | cgaccaaaca | ggagaaaccc | acagccggtg | gcagccggcg | 1020 |
| cgcgacgagc | aaccc | | | | | 1035 |
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| gcaacttctc | tgatcgtacc | acctactaga | tccactcacn | nnnnnnnnc | cgcgccatga | 120 |
| accgttgttg | cacccggtag | caccacacnc | ganctgcatg | catgcaagct | tctgatgcca | 180 |
| cctcactccc | acggagactt | tgttggaaat | taaaggatat | ggcgcattcc | catagtgggc | 240 |
| attggaggct | tggggaagac | cacacttttc | aaggtggcgg | tcaacgacaa | gaggatggat | 300 |
| gaaccttttc | aactgaacaa | gcgggcgggg | atcctcggtg | accttgacac | ttggcacaaa | 360 |
| attattaaaa | atgtcaacca | tgctttagtt | ccaaccattt | ccctggctta | acatgaaatc | 420 |
| attaaccatc | tagaaattga | cccagcccac | aagtcattca | agaataagcc | ttctggccaa | 480 |
| aaggtcttac | tcaggcttga | tgacctatgg | aatggaaaac | atgccaaaag | gatagagtta | 540 |

aacaagtgga ctcagtcggc ccataggaaa caaaatccaa tgggcgctga accaaaccca 600

| ctggtccaag | g gaacgeteed | : ccaaaagcat | aaacaggcct | tccaaggaaa | atggccaaca | 660 |
|-------------------------------|------------------------------------|--------------|------------|------------|------------|-----|
| atccttcgca | a cgggccgcca | aggaagccaa | gaaaaccttg | agcgaccagg | cgagcgccgg | 720 |
| ctgtaaacta | a gcacagccta | gctccccaco | gcaccacaat | ccatcccgcg | cccctcacgc | 780 |
| tctcaaaccc | acacatacaa | . atcagcacto | ctccgcgacc | accccacccc | cgcagcccac | 840 |
| ctctcccact | tgacacaacc | gcgacgaggc | ccaactcctc | ggccaccgạc | tgcccaggcg | 900 |
| catcacaccg | g aatccg | | | | | 916 |
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| atgtccccta | accttgtaat | cttttactca | ctctaaaagg | tcaaaagcgg | gtgaagtacc | 120 |
| ggttttggcg | acacaaaaaa | tagttctcat | aattgtgata | cacaccatta | tgacccccag | 180 |
| gggggctcct | cttggcagcc | ctttatttct | ccaataaacg | tttttctgta | aaaatccttt | 240 |
| acctgaga | | | | | | 248 |
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| aactctaacc | agccacggga | gcttgatcgt | tgtcctcccc | gaccggtaac | taatcgcagc | 120 |
| ctgcagcctt | caaaatttat | aagagatacc | tccaaacttg | cgtcaaccca | aaggcgcacg | 180 |
| cagcţcgatc | gaccacaaaa | cggtgcacta | tgggctaggg | agcgaacacg | ggcggctaaa | 240 |
| ccaaaacttc | ttgacgtccg | cttggcgcga | acaaaggcgt | ctaaaagcgc | cctacctgga | 300 |
| cagataggcc | attcgaagcc | caaattaagg | agagtggcaa | agagagggtt | caaagactgg | 360 |
| gaagaatgtg | tccgagaacc | attaggtata | ttatggaccc | caaggaacct | cggggaccat | 420 |
| accctcggac | ctcaaatttc | ctctgctaaa | cacagcctcg | tgctacggaa | tctatccggg | 480 |



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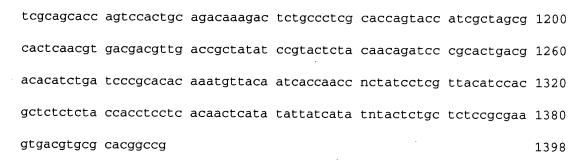
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<223> unsure at all n locations

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| catcagcgcc | cacgcacaac | caacaacgcc | accacccaac | agtaccgacc | gagcggtcca | 900 |
|-------------------------|-----------------------------------|-------------|------------|------------|------------|------|
| cacagaaccc | tacacaccag | ctacagaaca | ccctgcacca | aacacaccac | cggccgacca | 960 |
| gacagcgaag | acgcaggaag | ccg | | | | 983 |
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| cactacgtat | ccagtacatc | tgtatcatgt | tcattcagtt | ntgacgagaa | ctatacagtc | 120 |
| gtcaaataan | ctacactanc | atnnctatgc | cctncnnncn | ntctcacgag | actgcnacna | 180 |
| gattgtañan | cccagctang | atctcatctc | ccancactta | cncccgagag | gnancccata | 240 |
| nntanacagn | atctaacact | cgcgcgggcc | aatggcacaa | gcttgggaat | atttcttaat | 300 |
| agacgggaac | actcttatta | tacgctctgg | gccggtaatt | cacatgaggg | acacaaacag | 360 |
| ctgggtgtcc | cctcggtgcg | agaaaacatt | ggntaatatc | cggcctcaac | acatattccc | 420 |
| accaccaaac | attacacgag | accgggaaag | cataaaaagt | ggcaacaggc | ccggggcggg | 480 |
| gccctaaacg | gaggtgaagc | ccaaacttca | caatttatat | ttgcggcttg | gcgcctcacc | 540 |
| ttggcccggc | ctttcccaga | tccgggaaaa | accctggccg | gggcccagcc | tggacattaa | 600 |
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| gacctacact | atatcaaaag | acaccgaaca | tgttttaaca | catagcaatc | tactatgcac | 720 |
| ctagcgccac | cgcgttaaac | taaaaccctc | tactgtaagg | gagcaaacgc | gcaacacgcg | 780 |
| ccttctcaac | acggtaacac | aatcctacca | gcgtctttat | ggaacattca | taccactctc | 840 |
| cgaaccaacg | tcgccatcca | ctacacacgg | caccgcttca | tcattctcca | ttcactcgca | 900 |
| attctgcgcc | ctaacacgac | tacagccttc | ctcatgacac | catgntcata | tatctaacct | 960 |
| cgacgataat | catcacacca | cgccattatc | ctacaccttg | tccgaccaat | cgtcacaaca | 1020 |
| cacacatcca | ccccaccct | caacataagc | acgggcgctc | acctacacga | gcggccatat | 1080 |
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|-------|---------------------------|
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| <212> | DNA |
| <213> | Glycine max |
| | |
| <223> | unsure at all n locations |

<400> 6510

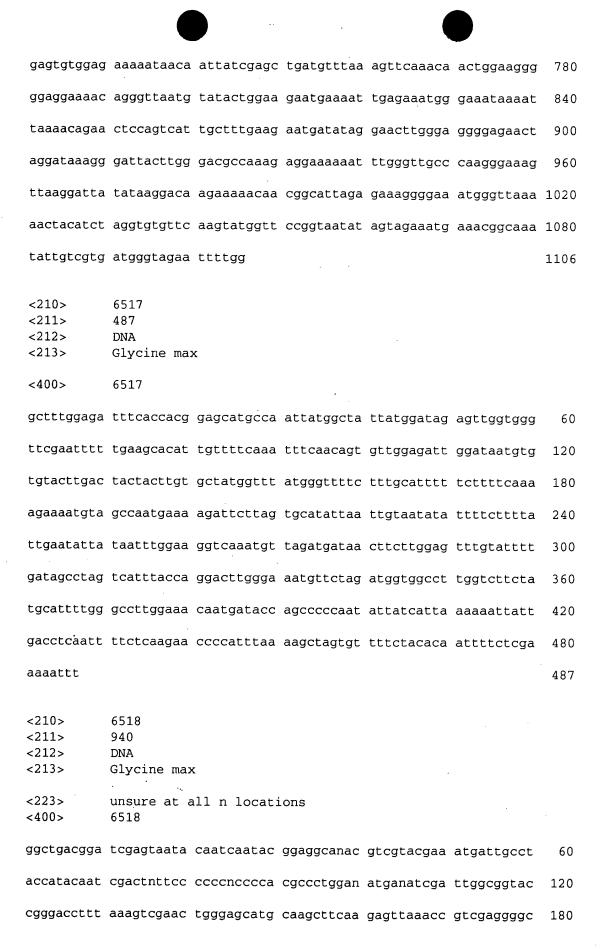
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| agagacacat | ggaaggtaga | acgcgtngac | gatgcgagag | gacagagtgc | acgacatgcg | 1140 |
|-------------------------------|-----------------------------------|------------|------------|------------|------------|------|
| ataccacgat | acgatatacg | cacgaggata | gaggagagac | ggtacgaagg | agcacacgac | 1200 |
| acatagaaga | ngagggatgg | cggangaacg | angagctaca | ngaacgtaag | gcgtaggaga | 1260 |
| cgaaacgagg | tacgagacga | ggaaggcagg | gaacgagtca | agacacgagc | acangangcg | 1320 |
| gagactggac | gggagacgga | cagagagacg | agcgtataca | cgtaaggagt | agaacgagac | 1380 |
| aggtagacac | agagaggaga | gcgagnagat | gacagcgcac | gcgagacgtg | aggggcgtga | 1440 |
| ggcgcgtaga | a | | | | | 1451 |
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| aaaaccatca | aaattttaaa | taatatcaag | gaaaaaaaat | taacacaaac | atgataatat | 120 |
| taaaattggt | agaatattat | aaaaaattta | taaatcacaa | atattatatt | acaaaaatta | 180 |
| taatgaccaa | aaaattagcc | gtgaggaaat | ccactatggt | gattcctccc | ttgcgtggta | 240 |
| acaaattttt | ttggagctaa | atgaccagct | taaaaaatcg | gtaagaaata | tgttttctaa | 300 |
| cctcaataag | ggttggggga | aaccatccga | tccttcaggt | ggcaggggcc | caacaaaaaa | 360 |
| tgggaggtgg | cacactaagt | gggaaaaagg | ggggtaccaa | ataaccgaat | gaaccttaaa | 420 |
| ctggccttta | agtactttta | tttggctcgg | cgcctggaat | aattatggtg | gggccggggt | 480 |
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| agcaaacata | ccccttctta | | | | | 560 |
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ttaagcggtt tagagaaata cttattttt tattaacttt cttaaagaat ttttaaaaca 120

| aaggtataac | cagcatggat | taagttaatt | caaccctgtc | tgtaataacg | cggaaaaaat | 180 |
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| tta | • | | | | | 183 |
| | | | | | | |
| <210> <211> <212> <213> | 6513 263 DNA Glycine ma | x | | | | |
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| tctgatatta | ccaatttgat | aattgagaac | aaaggctcaa | gattcttcaa | tgtactctaa | 120 |
| aattttttg | ctaaaccaac | aaaaactcag | attaactacc | aaagccaact | attgaatttg | 180 |
| ttaaaaaaaa | aaaagaaacc | tcctctcaac | cttgcatttt | gtactggaag | aaaacaaatt | 240 |
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| tggtgttcca | agaacacaca | cacccacatt | ataagaggca | ttccaaaagg | gttttagtat | 120 |
| ccttagaaat | gccaaaactt | gcccaaagtt | aaatggttaa | aacaaataaa | caaatcacat | 180 |
| aatgggaagg | ctattggcta | gaagaaagac | aacagaaaac | caattggagg | ggtggttttt | 240 |
| cctttttcat | ttttttatat | gaaaaaaata | aattataata | taaaaataaa | ataaatgaaa | 300 |
| cagaatctac | agagaaaaaa | ggtttgatag | gcaacaactt | aaacattcct | tccacaaaac | 360 |
| aaggtggagt | gaaactaact | aaaatacctc | aaactatctg | aatcctcaag | gtagatagac | 420 |
| gaagcaacca | agggtacaag | tgatttggac | ttagatatct | aaacccaaaa | aacacctact | 480 |
| ttgcaatagc | ctgaaatatg | ccatggttac | attttgttgg | gaaagtaatg | agg | 533 |
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| agacctccaa | tcattaatgg | agagggttac | cactactgga | aaacccgaat | gcaaattttt | 120 |
| attgaggcaa | tagacctaaa | tatttgggaa | gccatagaaa | tagggcctta | tatacccacc | 180 |
| acagtagaaa | gagttacaat | agatggcagt | tcatcaagtg | aaagtataac | aattgaaaaa | 240 |
| cctggagata | aatggtctga | agaggataga | aaacgagtac | aatacaattt | aaaagccaaa | 300 |
| aacataataa | catctgccct | gggaatggat | gaatatttca | gtgtttcaaa | ttgtaagagt | 360 |
| gctaaggaaa | tgtgggacac | tctttgatta | acacatgaag | gaactacaga | tgttaaaaga | 420 |
| tctaagataa | atgcactaac | tcataagtat | gaactaatta | gaatgaatgt | caatgaaaat | 480 |
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| _ | | | | aagagctgtg | | 120 |
| | | | | cttagaataa | | 180 |
| | | | | gagcgagaaa | | 240 |
| | | | | ggcacaagaa | | 300 |
| cggcgtcgag | tgagattata | gcgtcatcct | aacagaagat | gtcancaatg | gataggcaca | 360 |
| atgcgcgagg | cgaattgtgg | acctgtggat | catggataaa | ggaaaggagc | atagaggtgg | 420 |
| gaactatgat | agttacatcc | accacaggat | aggtntgaat | taaaaagaat | ggagtttaga | 480 |
| aattgggagt | agaaaaaaaa | ggtctggggg | gaaaaatatg | gggcaacgta | tataatagtg | 540 |
| gtggataaag | cacaaaagca | aggattgttt | ccttaccagg | tgtaggggaa | ataggtataa | 600 |
| aggggataaa | cataagagat | agaaggatgg | aaaggggttt | tactaaatat | tgggggggtg | 660 |
| tggtgcagat | aagaaattaa | gggagtggag | tttaaattta | cctcaaaaag | aaaataaatt | 720 |



| tcaaaatatt | attaaaacga | aaccttctta | ggagtaaaag | gttagaaaca | ttttagtccc | 240 |
|--|--|--|---|--|--|--------------------------|
| agaaaggaga | accgtcaagc | agatgtaaac | cgggaaaaaa | agaaagtgga | cgaagagggg | 300 |
| atcccaagaa | aaaaaaaggg | caaattaaaa | aaaggagggg | gcggggccag | caaaaggaac | 360 |
| aagtctgcaa | agtgggcgag | tggcggtttg | gggcaatcca | tgaaaccaag | gactaggagg | 420 |
| gagaaacact | ataataacaa | ttaaaccaaa | acatatcaaa | aaacaaaggc | ggctagagat | 480 |
| aacaaggaag | cacctttgca | tacaatacca | gcgggagggc | acagaagtaa | tctacttaca | 540 |
| tacaagaatt | aaaaccggag | gaagaatcag | ggagtccagc | cactgatacc | ataggaacta | 600 |
| ggccaaagaa | tagaaagacc | ggaaaaaaaa | agagtggacg | atagatttga | aaaatgagac | 660 |
| ggctgaactg | gaatcgggaa | gatcacagca | cgactagacg | gagcgaaaaa | acaatacaag | 720 |
| ggagcggggt | gaacacgaat | aatcaatagg | gaaccgaagg | ggcatcaatg | aaatgaataa | 780 |
| gtgaacacct | aaccagaaga | cagaacgaag | tcatcaggct | gtgatagacg | ggcataatga | 840 |
| tgagaacaac | cgcgcagccg | aaacaacgtg | gtacaacggc | agcgcagcga | atacggtaca | 900 |
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| <211> <212> <213> <400> cctgcaagcc cgcttaccaa aaaattcaac gttggccaat ccacagggac | 323 DNA Glycine max 6519 tgcaagcttg aaactgcata cttattttca gtaccaaaat | acgtaaatca ccaagaatat aacaaaaaat ctcacaagta cttaaaataa | catgactgtt atactttgtg ttgtttccac agaaagttct | aaacatgtca ctcaagacca cggaagttcg | gaaggggaaa ctggtaactc aatgtccaat | 120 180 240 |
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| agccttgggg | ctaaagacct | atataacagc | accatggtta | tagtttaaga | agtttggggt | 60 |
|----------------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| gaagagaata | attttagaag | cttcgcaaat | ccagtttgga | ttacaggtca | tgcccactgt | 120 |
| tcacgtaaaa | taaaattcgg | tttctggaaa | tttgtttctg | cttcaaacta | caatagtgtt | 180 |
| ttctgctgat | taatggaagg | ctaagtctcc | agcgcggttt | tctattgaag | agcacagctc | 240 |
| tctttgaagt | ttcgctatta | ctattgaata | ctgatcagtt | attcctcttc | accaaatact | 300 |
| ctgaatttgg | cgctaataat | cgatgcatgc | ttaaagcttg | attaatagac | tctgagccta | 360 |
| aattacattc | atgcttaatg | atcaagttcg | tacatgagaa | ataggggaat | atgtagctta | 420 |
| accacaaaaa | gaaaagccta | tgtccatttt | cgcttaata | | | 459 |
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| aaaatgcacc | catatacaat | caaggtagct | tcattaccta | gattatttac | atgtacttcc | 120 |
| aaggtgtatt | tgttatttac | atcacacacg | cctccttggc | taaatttaca | tacatgcata | 180 |
| ctcaaagcat | ttcggggtac | caaaaattgc | acatgcgctc | atcttggtat | ttctaatacc | 240 |
| tatacatata | caaacttcat | gatgaatctt | gactacctac | gcaataaggt | gctacatttc | 300 |
| atgctctttt | tttttttt | ttttttgagg | ggaatattaa | ccatgtcccc | tcccttctca | 360 |
| tggattagca | tcttgcctaa | cttgaactta | cttaggttag | aattaggcgt | tggatactta | 420 |
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| gg | | | | | | 482 |
| <210> <211> <212> <213> | 6522 318 DNA Glycine max | | | | | |
| <223> <400> | unsure at a 6522 | u n locati | ons | | | |

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| | atggggcaga | gacctttgct | ggatgggtgc | cgaatggagg | ggtttccggc | atagccaaaa | 120 |
|---|----------------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| | agcttggatg | gtgctaggca | tattgatgaa | tattgtgagg | tgttgattgg | ggttttggcc | 180 |
| | aagcaggaac | cgaggtcacg | gcatgagcat | ccctttcttt | tctttttgcc | ccggccattc | 240 |
| | tgaatctttt | gttgcttgtg | ctggcagggg | cgacatantc | gaacttccct | attttaggcc | 300 |
| | tatctcgatc | cctctacc | | | | | 318 |
| | <210> <211> <212> <213> | 6523 451 DNA Glycine ma: | x | · | | | |
| | taacatcatg | aaaatttctt | aaatcacatt | atttttatat | gggtattgct | aattggggtt | 60 |
| | tttaaagata | ttagttaaga | aattaaaaga | aaaaagtatt | tattatataa | ttataagaat | 120 |
| | attaaaaaaa | tcattaataa | tgtaatttta | tgtattttga | taaaaaaaat | taattttta | 180 |
| | attaatattt | taacagcact | cggtagtatt | tgtattttt | atttattaat | ttttcgttta | 240 |
| | aatataattt | taatccttaa | ttcttgtaac | ataattacac | ttttacttta | aatttttat | 300 |
| | tttttatttt | tgaaaaattt | tatattcaac | ttttttattt | ttgatgaatt | ttatccttaa | 360 |
| | atctttttgg | gaaaaattta | tttcacactt | ttgtgttcct | taatagataa | atgatgaata | 420 |
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| | atcatttgga | tttgcgggta | caaaggacaa | gcgtgctgtc | acgacccaaa | gggtgataaa | 120 |
| | ttttcacttt | cattgttatt | ttacattaaa | cattcattcc | tttcttcatt | ttccagaatt | 180 |
| , | ggtatcggtg | ctcatttagt | aataaatact | tcaattggtt | tattacttgt | tttgtttcta | 240 |
| • | ggttactgtt | tacaagcagc | gagcaagtcg | gctagcttcc | cttaacaagc | gcttgttcgg | 300 |
| 1 | tattaaattg | ggtgatttct | ggtaatgtga | ttgaattttg | aatggttgac | gttcttacct | 360 |

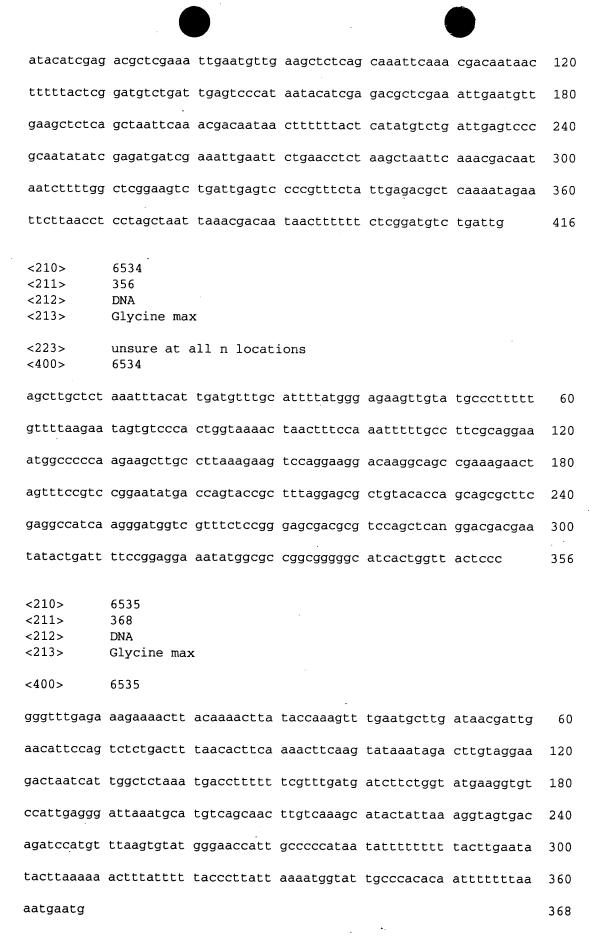
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| aaggaaggac | tttgtcttgg | ccagctcttg | ggaaatcgat | ttacaatcac | attgcggtga | 480 |
| ggactttatc | tttgcatgaa | attcaatttc | ctatgtgaaa | С | | 521 |
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| tggtttttt | ttttgcacaa | tgactaactc | ttaatcgact | tacagataaa | tatacaatct | 120 |
| caacacttag | tcttttctct | caagaggttt | aaagagcttt | gagggctttt | tcaaactata | 180 |
| caaaaattta | caaagagctt | tttacataaa | gaatttgaat | aataatgtgt | aggtttgtat | 240 |
| ctcattcctt | taaatgacaa | gtgtatccta | cgccttagta | atattggact | aaaagtttga | 300 |
| atattatacc | ctaaagacca | ttcttgctaa | acttgtctct | ctcaacaaag | actatttgta | 360 |
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| agccaagctt | gaacttcaag | tgttcaactt | ggctagatag | acttgtttgc | acctttactg | 120 |
| ataaatgact | aatcagaaaa | ttaaattcac | atagaggaat | acaatcatta | tactaatgta | 180 |
| taggtgacag | acacacctta | cttttgcatt | taaccttgta | gactgcctct | ctgaatgatg | 240 |
| agacaaagct | gttattaatt | ctgatctgcc | aataaaaagg | caggggaaat | aaaaagtatt | 300 |
| agctgtgaaa | tatagaggtg | agaataagaa | cagaaccaac | ctgtgcatga | tgaagatctg | 360 |
| gctcaatgtg | tttcctaaat | aatggaaaaa | tgctatcaat | aaggtaatcc | agtgaacaag | 420 |
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| (213) | . Grycine ma. | · . | | | | |
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| tcttctattt | ttcgttttta | gttttggtct | ctcttctctt | tcgcttttat | tttcgttttt | 120 |
| tacaatttca | gttcacactt | ttagttttat | caataaaatt | tcgttctcta | tttgattaat | 180 |
| ggaaggctaa | gtccgcagcg | ttgttttctc | ttgaggatca | agcacagttc | tctttgaggt | 240 |
| tctattatta | ctgttaaatt | ttgttcagtt | tttcctcttc | actaattact | ctgaatttgt | 300 |
| tgctattaat | tcatgcatgc | ttagtgcttg | attaattgtc | tctgcgctta | atttacgttc | 360 |
| atgcttaatg | atcgtttatg | agtaattggt | gtgtgtgatg | cttaatcaca | taatgaatgc | 420 |
| tttatggtaa | attcccctta | gtaatttaat | ttaagggtgg | gattaagggg | ttaaactgat | 480 |
| aagggataaa | attctcccac | ctacgataag | aaacttgctt | gtgaatcaag | gggaaccaac | 540 |
| ctattttaat | tccgataaat | ttctaaatca | attttcctcg | ctgggtaaat | taaccaaagc | 600 |
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| ctccaaatgc | cctgaaattc | aaggctaaaa | ccctatacta | ctatggcacc | cttaacttgt | 120 |
| acccttaatt | tgtatggttc | cctacaaacc | tattctaata | tttgccaaga | ataagtggac | 180 |
| ccaaccttgg | cccatgggct | cagaaatcta | ttctcacgtt | catgacaacc | ctaggacctt | 240 |
| ctttatcagc | tctcacccaa | ttctcttgga | gactcttgct | tatggctctg | gtgactgccc | 300 |
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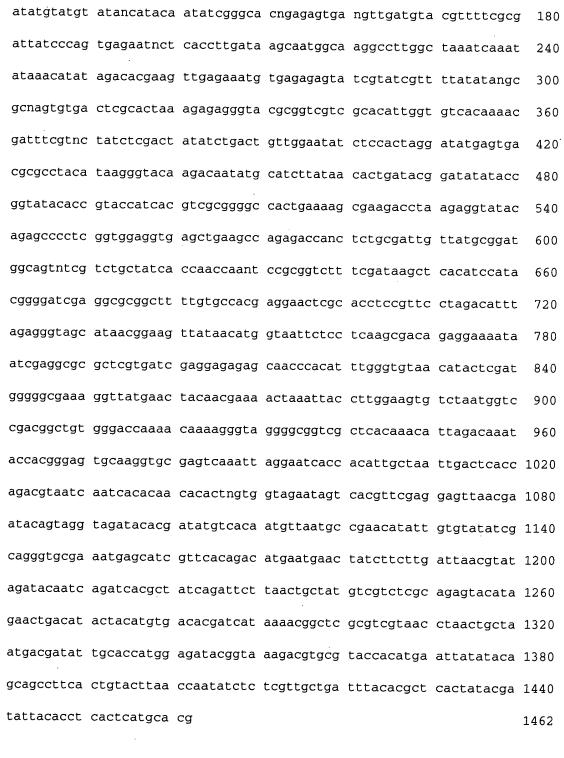
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| aattattgat | tgattgaacc | ctgagcctat | acaatgttat | atcctgctac | cttggattan | 360 ⁻ |
| gttgtaggag | agcctcatcc | acaggaaatg | tggttcaaag | caaatttgtc | cccaatttgg | 420 |
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| agcttcagaa | ctaggattgg | | | tagaacaaat cactgatttt | | 60 120 |
| agcttcagaa aacaaaaagc | ctaggattgg | ttcacttttt | ttttcctgga | | tctgttaact | |
| agcttcagaa aacaaaaagc tgtgtgattt | ctaggattgg acacttcgct ttcttatttt | ttcacttttt | ttttcctgga tccaaaatcg | cactgatttt | tctgttaact tttttataat | 120 |
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| agcttcagaa aacaaaaagc tgtgtgattt tttggtccag ttcccagtaa | ctaggattgg acacttcgct ttcttatttt atgtctagaa tttatacaag | ttcacttttt ttttcttgaa aattcaataa tttgtatgtt | ttttcctgga tccaaaatcg aaatttcagc caagttgcca | cactgatttt cttggttctt tcaaaacatg | tctgttaact tttttataat tagtgaccaa tttcaaccta | 120 180 240 |
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| agcttcagaa aacaaaaagc tgtgtgattt tttggtccag ttcccagtaa gaaatcaaga atgctcaatt | ctaggattgg acacttcgct ttcttatttt atgtctagaa tttatacaag gtagtgttta atcttgaata acttagcacc | ttcacttttt ttttcttgaa aattcaataa tttgtatgtt tgttgcttaa acacaattca | ttttcctgga tccaaaatcg aaatttcagc caagttgcca ggcttggata agagagctta | cactgatttt cttggttctt tcaaaacatg gcaccagtga gttacaattt agacttattt | tctgttaact tttttataat tagtgaccaa tttcaaccta gtgtttgctt gattcacaaa | 120 180 240 300 360 420 |

| agctttgctg | atttaatttt | caccgacgaa | aggatcaaag | tgggtataaa | aagaagcaaa | 60 |
|-------------------------|-----------------------------------|--------------|------------|------------|--------------|-----|
| tttaatcato | ctgcttggac | gaatgaaaaa | actagggcaa | ttaaagaagg | f tgagaatgaa | 120 |
| ggaaaaacco | atgctatgac | taccattcct | atacagecea | gtttaccacc | : aacccaacaa | 180 |
| tgtccttact | caacccataa | caaactttct | tcttccccac | cacccaatta | tccataaagg | 240 |
| ccatccctaa | atcaaccaca | aagcctgtct | accacacaac | caatgctaaa | caccaccttt | 300 |
| aacacgaacc | aaaacaccaa | ccaaaaagga | attttgcaac | aaaaagcctg | taggattcac | 360 |
| cccaaattcc | ggtgtcatat | gctaaacttg | ctctcatatc | tactcgataa | ttcaatggta | 420 |
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| acatgtgca | | | | | | 489 |
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| <223> <400> | unsure at a 6532 | all n locat: | ions | | | |
| agctttgagg | gtgcgtancc | caccatcttt | tcatagtaga | gtatcgataa | tgtgtctacc | 60 |
| atcacgatca | tcgtctccct | ttccatcatt | gggggtacca | cctgggccgc | cagatccctc | 120 |
| caccttttgg | gcgtgttctt | tgaaagatcc | gtcccccttt | ttgcaaatgt | tctgtagttg | 180 |
| catcctatcc | ggaaccatat | caaaattgta | ctgatactgc | ctaacaaagg | caaccattag | 240 |
| gtccttccaa | gaatggactc | aggaaggttc | ctaagttagt | ataccaggtg | acagttgtcc | 300 |
| tagtaagact | ttctcaggaa | aaatgtatcc | gcagtttctc | atcttttgcg | tatgccccca | 360 |
| tcttcagaca | gtacatcctt | agatgggtct | tggagcaagt | agtccccttg | tacttgtcaa | 420 |
| agtccggcac | cttgaacttg | ggaatgacca | tgtttgggta | | | 460 |
| <210> <211> <212> <213> | 6533 416 DNA Glycine max | | | | | |
| <400> | 6533 | | | | | |
| agctttgagc | taattcaaac (| gacaataatg | ttttgctcgg | atgcccgact | gagacccgta | 60 |



| <210> <211> <212> <213> | 6536 448 DNA Glycine ma | x | | | | |
|----------------------------------|-----------------------------------|--------------|------------|------------|-------------|-----|
| <223> <400> | unsure at 6536 | all n locat | ions | | | |
| agcttgttca | ggagggcagc | agtgaaatgn | gactgccact | acccttctct | ctctcttgga | 60 |
| ttgactatat | ațatgtttt | tattgaacta | ccaaattaat | atatatatat | atatatatat | 120 |
| atctatatat | atatatatca | agcaataaat | actaccagag | gtactacagg | atagcacacg | 180 |
| agagaagaac | tccttaaatt | gagaacaaaa | aacagaaatt | catttgccca | caaaaaccac | 240 |
| cagaaacctg | accttacaga | acacactcta | attaaaagcc | atagacatag | ctgaggacca | 300 |
| ttgatgaaaa | gggaccatta | aagtcctttt | cccgccccc | tcagccagga | cgaagtgaaa | 360 |
| aaatttgtgt | tttccaccca | ccttagagat | gtgaaaaggt | tgattatgaa | aagaagatat | 420 |
| tcattggcgg | aacctttcat | atttgacc | | | | 448 |
| <210> <211> <212> <213> | 6537 968 DNA Glycine max | ς. | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
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| atctccnncc | cgcgctgatt | gagccttcca | aacccgaacc | caacagagac | tgcaagcttc | 120 |
| taccaaagga | ctaccacgga | caaagccttt | tataacccca | aggaaccttg | gggaacaatc | 180 |
| cacggattga | aactcactac | aacacctaag | tgaaaaatca | tgataaaaac | caagtcacgt | 240 |
| aaggagataa | aggagctttc | ggaacccgac | atgggaaaag | agcgaggagg | gatttaagtc | 300 |
| ccataggaca | acatagactc | ggcggggtat | gcataaacga | cgcatgttgg | ggcctataca | 360 |
| tgaaagcaca | ttgcacaatc | ggcacaaatg | gcaggacaat | gctgaaccga | aaacggctaa. | 420 |
| ctattcaaag | ggcaagggca | accagaaaaa | aaaacacaca | aaccttcgaa | aaaaaaaag | 480 |
| gaaaaaggaa | ccgaaccctg | gaaaaaccag | tcacaggtcg | aagggaaata | aacaccttaa | 540 |
| ggggcgccac | aaaggaaaaa | aggacccacg | ggagcaaaca | ccccacaata | aaaaactgcc | 600 |

| aaactaaaac | aaccaagaaa | aggcggaaat | taaagaaggc | accgaagaca | ccacatgata | 660 |
|-------------------------|------------------------------------|-------------|------------|------------|------------|-----|
| agccctatto | cattcgggga | gtaaagacga | cataaggccc | agatcatcag | caaaccttgg | 720 |
| gccgctggga | caaactaaca | cgctaaaaag | aaccataaaa | accctaacac | gcccggagct | 780 |
| taaggggacg | atgggcaaga | taaaaaaact | gacccacaaa | taggggagca | agcgttctac | 840 |
| gggggcccat | gagggcaaac | agcaaccaaa | aaactcgaaa | gaaaaaaggt | agtaaccggg | 900 |
| gagaggcgat | cacaccgcat | gacatgaaca | caataccaac | ctagggtcaa | caagggaggc | 960 |
| gacggaag | | | | | | 968 |
| <210> <211> <212> <213> | 6538 526 DNA Glycine max | ς. | | | · | |
| <400> | 6538 | | | | | |
| agcttatgga | catcaacaaa | caaaaaaaaa | aatcatcatt | tcaatcatta | aacacacaac | 60 |
| caaaacatta | acctaaccaa | attaaagctt | cccttacctt | tcaagctttt | tccccaagct | 120 |
| aagttttgac | aaagagaatg | gagaaataga | atcttgagat | ccaccaagga | tttcctacaa | 180 |
| tcaatagcac | caacacacca | tacccagggc | tccaatttgg | gtcactccaa | ggaaaggaaa | 240 |
| aaagtaaaga | aatggagcaa | ggagatcaaa | ggcggaatga | ggagagctta | cccactccat | 300 |
| ggcagtcaaa | gaagctctaa | ggaagaagac | ataagccacc | aaagacaaaa | gagtaacttt | 360 |
| gagataaaga | aggagataaa | agggagaaga | tgagagatgg | aggaagcttt | gcatgtttaa | 420 |
| agctttggaa | aaatagaaat | ttttgctaac | tggacctcaa | cttcctctaa | atatacccct | 480 |
| cactaaaata | aaatacacat | attttaagtc | cattttcgtg | aaaacc | | 526 |
| <210> <211> <212> <213> | 6539 1462 DNA Glycine max | | | | | |
| <223> <400> | unsure at a 6539 | ll n locati | ons | | | |
| agcgagacat | gcgcttantc | gagtctgtac | ttacgataan | ctctagtgtg | aaacgtagct | 60 |
| atgactntaa | ctttcgtacg | tatctgtacg | tcactgtatg | natatgcatg | tcacacatgt | 120 |



<210> 6540

<211> 906

<212> DNA

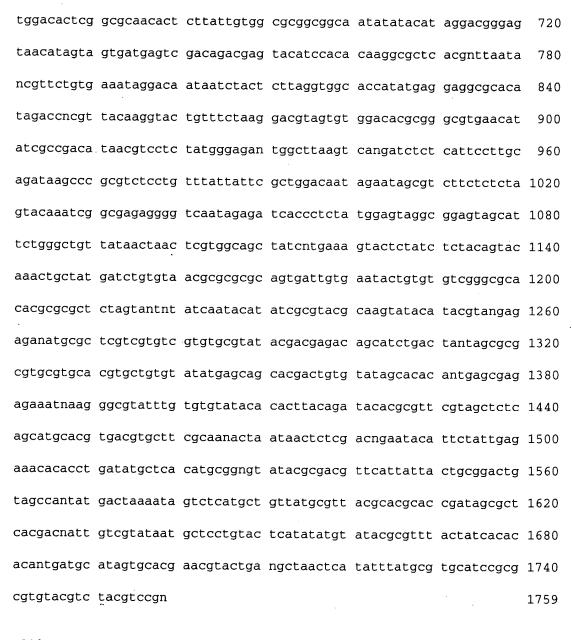
<213> Glycine max

<223> unsure at all n locations

<400> 6540

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|---------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| taaacgcccc | : cgtccnncnc | ccccgnnatg | aaccgtgacc | ttccgggacc | ccagagngan | 120 |
| cggaggcagc | caacaccata | ctggaacata | caaccggcaa | acatatttt | tatgggggaa | 180 |
| atcacggagg | gcttcaaacc | cccacaggaa | agaaataaca | gaaaatatct | taaggtcata | 240 |
| aactgcccaa | aattctccta | acaaaaaatg | aaatcaatca | tggagtgatt | aagaactgaa | 300 |
| aactaactag | aacctcacct | aaacatttat | ggtaaatagc | tctttcacta | cggcaacatt | 360 |
| ctggcctaaa | tattaccttg | caggctacca | ctgggaggga | aaacaactat | ctaagacata | 420 |
| agctcggctt | tgggctaact | gctaagcaaa | aaaaggaggc | cctcagcaac | aaaacgcccc | 480 |
| aacatggacc | atactggctg | aacctgagac | ggctctcccc | cccaccggcc | ctttaacatg | 540 |
| aataccctga | aaaaaacaca | cctctgcagc | cggaaaataa | aaactcggct | tcccccccg | 600 |
| gacacaactg | acaccaccgc | acaggctcat | ccatcgtacg | aaaccgccgg | cacaccgcaa | 660 |
| cgcaacacca | ccccacggg | acacaccccc | cacaccaaac | accaaaagcc | tcacccaaag | 720 |
| ttattgttta | aatttttaac | ccccgtgggt | agggaacgag | tttgtggttc | cccggtntt | 780 |
| tttntttata | aaaaaagaag | acaagagaag | acconnnnn | tncccccca | gaaggacata | 840 |
| aagcctgtct | nnnccnnnnt | tttnttttt | nnncacgcag | gttcgccgcc | cccccccc | 900 |
| cgcagc | | | | | | 906 |
| <210><211><211><212><213> | 6541 415 DNA Glycine max | ζ | | | | |
| <400> | 6541 | | | | | |
| cttgaagggt | ggaacccacc | attttccata | ataaaaaact | gggaaagggg | ctactatcat | 60 |
| tggcatcatt | tttttcatca | ttgaggggcc | aactgagctg | ccaagttctc | cacctttggg | 120 |
| ggtattcttt | gaaaagaccc | gagccccctt | tttgcacatg | ttttggagtt | ggatcctatc | 180 |
| cgaagccatt | ataccgacac | tgcctaacga | aggcaaccat | tagggcctcc | caagaatgga | 240 |
| cctcaggaag | gttccaagtt | agtgtaccag | ggaataacta | ccccagaag | actttcttgg | 300 |
| aaagaatgga | tcaacaattc | cctatctttt | gcggatgccc | ctatctttc | gacaatacat | 360 |
| ctttaagatg | gggtcttggg | gccaagtaat | ccccttgga | ctttggcaaa | agccc | 415 |

| | <210> <211> <212> <213> | 6542 394 DNA Glycine ma | ıx | | | | |
|---|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| | <400> | 6542 | | • | | | |
| | agcttaagct | ccttcaactg | cacaagctct | taatatttga | agagtatcct | tgtggaacct | 60 |
| | tcacctgacg | aagacactga | . caaaaactta | tetteteett | cttggacaaa | atatggcagg | 120 |
| | ctgggggcaa | gtaaattttc | ttcccatcat | accttggatg | caaatgtgat | tgtataccca | 180 |
| | tatcaggtag | atcttgacgg | gtattcaagc | catccttcgt | cttgccttga | atgttaaaga | 240 |
| | gcgtcccaac | cacactgtca | caaacatttt | tctccacatg | cataacatca | atacaatgtc | 300 |
| | taacgtcaag | atcacaccaa | gtcggaagat | caaagaaaaa | ggacctcttc | ttccatatgc | 360 |
| | aactctgact | tttatccttt | ttttggggcc | ttcc | | | 394 |
| | <210> <211> <212> <213> | 6543 1759 DNA Glycine ma | | | | | |
| | <223> <400> | unsure at 6543 | all n locat | ions | • | | |
| | tccgcttagc | ccgcaagtct | agcgtgtgtt | antgtagtcg | cagaatcntc | tcagtagcac | 60 |
| | gtacagcact | ctttgtgtca | tcatcgnana | tcantgnanc | tatctaagtg | ttcacatcac | 120 |
| | ntatgtagat | gatgtcgctc | gngcgtgcac | tntacacaca | gtagacgttg | aangctcgtt | 180 |
| | gagatctctt | ctcgcagtga | caccgtggaa | tacatttcta | gatagatcga | tcatctagca | 240 |
| | tacgctatac | ctaatantgc | ctgatcaacg | agacaatcac | aacanacaca | gatcgtctat | 300 |
| | gtatcgatct | ttctctcagg | tatgcgcgcc | aatggcacng | accacacgac | ctcaatgagc | 360 |
| | gagacgtaca | cacatctcgc | tctctgactc | atcttcgtga | ggctctcaan | cacaacacac | 420 |
| | acatgatatc | tcgcgcgtgc | gctatatacg | acacgacaca | actctcgcaa | cgttgtacac | 480 |
| | tgtcagtcgc | tcatcaacgn | gcggctgcaa | ggagagatgt | ggngtgcgta | acgttgctgg | 540 |
| ۰ | gcccattagc | atcggagacc | aaggaataga | gcgacctata | tgtagatatg | cgctgtcggt | 600 |
| , | acgtctcaan | cgcgtgagac | aacatggccg | cgaggcgaga | agcgtgtgtc | gtgtaaatta | 660 |



<210> 6544

<211> 266

<212> DNA

<213> Glycine max

<400> 6544

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ttgcccaaaa ccaagcttga ccaatcccga cccaacccgg gcatagtcgg tcagtgagaa 180
cctgtgatgt acctaagcag gcgagctcct ggcagtcaac agattaaagg aaccaagacc 240

| acctagcaag | gaggcttgtg | gtggct | | | | 266 |
|----------------------------------|------------------------------------|--------------|------------|------------|------------|-----|
| <210> <211> <212> <213> | 6545 537 DNA Glycine max | x | | | | |
| <400> | 6545 | | | | | |
| agcttggaga | ggatgcttca | atggaggaaa | atatagaggg | agagaaagag | ggaggggga | 60 |
| gcacgaaatt | gaaggaagaa | aaagggagag | aagttgaact | ttgagttgtg | tctcacaaga | 120 |
| ctctcattca | tcaaagttac | aacaagtgtt | acacatgctt | ctatttatag | actaggtagc | 180 |
| ttccttgaga | agatttcttg | agaaaacttc | cttgagaagc | ttctttgaga | aaacttcctt | 240 |
| gagaagctag | agcttagcta | cacacacccc | tctcataact | aagctcacct | ccttgagaag | 300 |
| cttccttaag | aagattccta | aagaagctag | agcttagcta | cacatacctc | tctaatagct | 360 |
| tagatcacct | ccttgagatg | agaagctaga | acttaactac | acacccctta | taatagctaa | 420 |
| gttcaccccc | atgacaaaaa | acatgaaaat | accaaaaaat | gtccttacta | caaagactac | 480 |
| tcaaaatgcc | ccgaaataca | aggctaaaac | cctatactac | tagaatggcc | aaaatac | 537 |
| <210> <211> <212> <213> | 6546 1247 DNA Glycine max | ς | | | | |
| <223> <400> | unsure at a 6546 | all n locati | ions | | | |
| gcccgacgca | gagcgagnac | ntaaggcncg | actacaccac | agatgtatga | cacaccanca | 60 |
| nggcactaaa | tcactacggc | tactcctagg | cggcgatgat | agagtcgcga | cgagcggnna | 120 |
| cgnnncncnn | nactccacgc | gcaattgaan | nttcgtagat | tcgaattggc | atatgtgcac | 180 |
| cannccccac | annnnnanaa | cgccgnanac | gaggggggcn | agcgcgccga | ggcgtaaaga | 240 |
| ccacgagcga | aggcggccgc | catgggcata | ttattattgt | tcgtagacaa | gcagcgcaca | 300 |
| ggccgggaga | cgcgcncgga | cgagcgacgg | acanaacaac | cggaccggac | aagacagcaa | 360 |
| tccactcggc | gtcaaccagg | aggcgagaaa | gagagagcga | aagggccgcg | cggcgggcat | 420 |
| aggaatacaa | tgccaggaac | tcacagcgca | cggaacgcga | gggaacgcca | caacggcgga | 480 |
| cgacggagaa | cccgcagaaa | gcgaagggag | ggagacaagg | acggggggag | atcaaagagc | 540 |

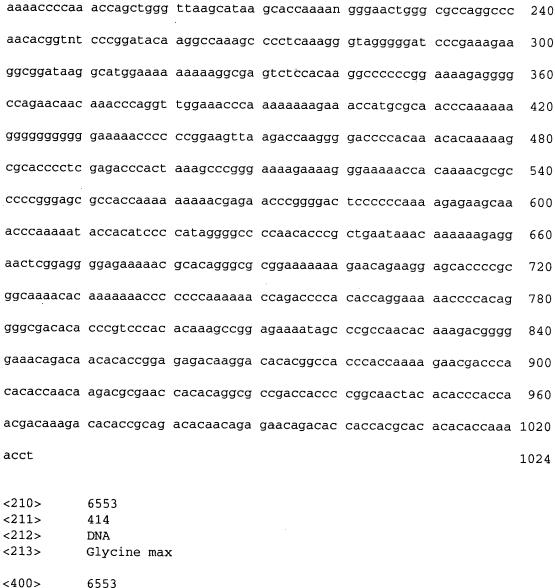
| ccgaacctac | ggggatacgg | cctaagaaag | aggtaaaaga | gaggggtggc | caaacaagca | 600 |
|----------------------------------|---|------------|------------|------------|------------|------|
| acgggtggac | gaaagacgga | ggatatacgc | acgaaagcaa | gaacaagaga | aatagcagat | 660 |
| gggagaagac | gcgacgagaa | agcccacacc | gagcacgcga | gagaatacaa | agaaacacaa | 720 |
| gggggcaggt | gtcgctccaa | gacgagcggc | tacaaggagg | acgaacacca | ccgtagtagg | 780 |
| agcgccgcgc | caacaaaaca | ggacatacgg | agggcgctgg | gacaccgccc | gcgggaacac | 840 |
| caggccgcac | agagagagac | gaggaccggg | ggggagcaaa | caacggccgg | gggtgagagc | 900 |
| aacgaacaag | gcgaattgct | gacgacccag | acgcagaaga | gaaaaggagg | cgacgcaaaa | 960 |
| gatgctgcac | aagacacaca | gaggggacgg | gcgaccacag | cacgcagatg | cggcgagcag | 1020 |
| gagacacgcg | aggcgccacc | ggggaggcag | acgccgagcg | cgaagcgaag | cgctcgaaac | 1080 |
| gggcgcgcgc | gttaagcgaa | cgcgagcgcg | cgcagaagac | gcaatcaagc | agagacgcgg | 1140 |
| agagcacgca | gacagacaat | accgaaacgg | ccggcagcta | cgcgccacaa | tgcacacgcg | 1200 |
| ccagagaagg | atgcgagaac | cagcgagcgc | gacacgagac | gtagacg | ٠ | 1247 |
| <210> <211> <212> <213> | 6547 347 DNA Glycine max | ς | | | | |
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| aatgccgaag | ggattttgcg | ctttactatc | catgttcaca | cattattgca | gcttggggtt | 120 |
| acctgaacat | gaactactac | caatatataa | atgttgttta | catgaatgag | cacatcttaa | 180 |
| aagcatactc | cgcacagtgg | gggcctcttg | gaaatgaagc | gggaattcct | tcttctgatg | 240 |
| aggcatggac | actaatccct | gacccaactg | caattcgtgc | gaaaggtcgg | ccaaaatcaa | 300 |
| caaggataag | gaatgagaag | gattgcctcg | aaccatctga | acaccga | | 347 |
| <210> <211> <212> <213> | 6548 382 DNA Glycine max 6548 | | | | | |

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| tttatcttag | g ggagagtgat | tctcctaaat | tcttgagtga | ttcaagaaca | ccctggctgt | 120 |
|-------------------------------|-----------------------------------|------------|--------------|--------------|------------|-----|
| atcaaaggac | tttcacaacc | tttgtgtgtt | gccctcgctg | gaaagaagga | ttctttcctt | 180 |
| cctttcatct | tcacccttgt | tctttcaaac | : cacaattcca | aaaaatccac | ctctgcccaa | 240 |
| aattatctcg | ı tggccataac | tcccatttta | cccactcaaa | . ttaagtgatt | cttgagccta | 300 |
| aattgacttt | caaaacgaga | cctttcacct | tgttttggaa | tcacctcatt | tggagccctg | 360 |
| taccttcagt | tattgccatt | tc | | | | 382 |
| <210> <211> <212> <213> <400> | 6549 463 DNA Glycine ma: | x | | | · | |
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| ctatttttga | gtagggatga | aggaactggt | ggcctaatac | tcaatcaata | aaaacagaat | 120 |
| gggctaagaa | tgtttggcta | gaaaatttgg | agaccggtaa | agaatggggc | actttgtttt | 180 |
| aaaaacagta | aaatatattt | tcaaagtttt | ttttatgatt | ttaattataa | atttaacaaa | 240 |
| tactacattg | taattttgtt | ttcaaatata | cataatttca | ggtcatgttt | aatttaactc | 300 |
| aaattaattt | caaagcatta | atacaccctt | tgcactattt | tctttttcga | agaaaaaaaa | 360 |
| taaaactagc | tgtacgaaag | agtgattagt | gacagagaca | tggtaacaaa | aattggcaag | 420 |
| agaaaacagg | aatagagatt | agaaggtgtg | aagaaagagt | gag | | 463 |
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| <400> | 6550 | | | | | |
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| atcaaaattt | gtttttttt | tttgcacaat | gactaactct | caatcgactt | acagataaat | 120 |
| atacaatctc | aacacttagt | cttttctctc | aaaatgttta | aagtggtttg | aaggcttttt | 180 |
| caaactatac | aaaaatttac | aaagagcttt | ttacataaag | aatttgaata | ataatgtgta | 240 |
| ggtttgtatc | tcattccttt | aaatgacaag | tgtatcctac | gccttagtaa | tattggacta | 300 |

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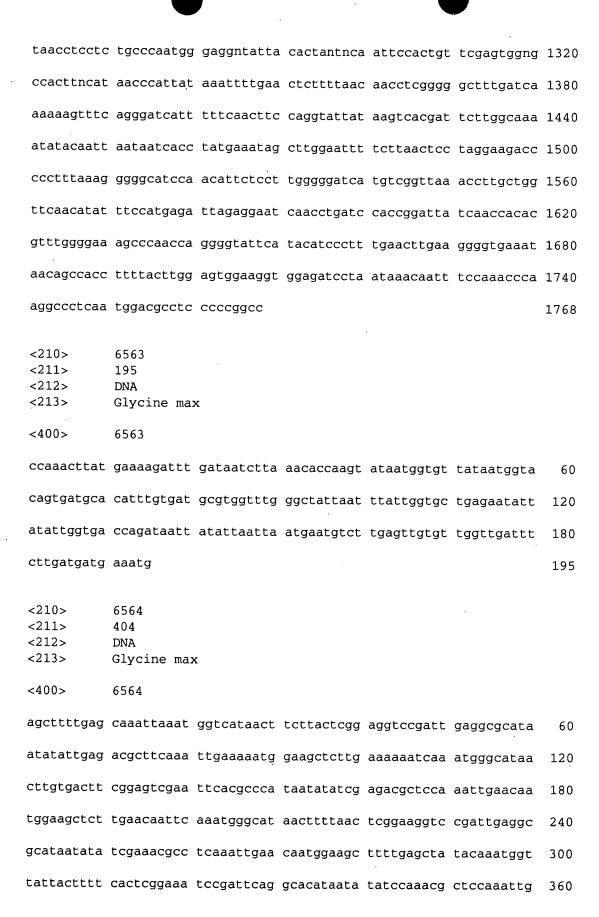
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| <210> <211> <212> <213> | 6560 516 DNA Glycine ma | x | | | | |
| <400> | 6560 | | | | | |
| | | catcaaaata | | | | 60 |
| acctcccatc | tttaatggag | tgggttacca | ctactggaaa | acccgcatgc | aaatctttat | 120 |
| agaggcaata | gatttaaata | tttgggaagc | catagaacaa | ggaccttatg | ttccctctat | 180 |

| aataaccgga | agtgcaacaa | tagaaaaacc | taaaacaaat | tggactgagg | aagaaagaag | 240 |
|-------------------------------------|---|------------------|------------|------------|------------|-----|
| attagtacaa | tataatttaa | aggccaaaaa | tattattacá | tctgccttag | gtatagatga | 300 |
| atactttatg | gtttcaaatt | gtaaaagtgc | taaggatatg | tgggatacac | tacaagtaac | 360 |
| acatgaaggc | acaacagatg | ttaaaagatc | taggataaac | actttaacgc | gtgagtatga | 420 |
| actttttaag | atgaaatgta | atgaaaatat | acaagacatg | caaaagaggg | tcacacacat | 480 |
| aggtaatcat | cttgcatctt | taagaaaaac | cttttc | • | | 516 |
| <210> <211> <212> <213> <223> <400> | 6561 1030 DNA Glycine ma: unsure at 6 | x all n locat | ions | | , | |
| cgccacatct | cttcatggta | ggtcaccgga | ataccttgtg | ttacactatc | caantactac | 60 |
| | | accccaacna | | | | 120 |
| | | ccccgggact | | | | 180 |
| | | tttcttttgc | | | | 240 |
| • | | aatacaattc | | | | 300 |
| | | gaaagttgag | | | | |
| | | atgggttcct | | | | 360 |
| | | agaaaacttg | | | | 420 |
| | | | | | | 480 |
| | | agctttacct | | | | 540 |
| | | ctacccccat | | | | 600 |
| | | gttgggggtt | | | | 660 |
| | | ggcgaaaaac | | | _ | 720 |
| | | tggataatca | | | | 780 |
| tgacataaaa | gagtgttatt | gtccggagac | atacctaatc | gcgtgaaggg | aaacggtccc | 840 |
| acataaagga | aatccggaga | atgtcttctt | tcttctcagg | agtttaattt | tcacatagca | 900 |
| ccttttggac | acctcctgga | ttaagggctc | tgagggactt | ttggccacgc | tattcgttta | 960 |

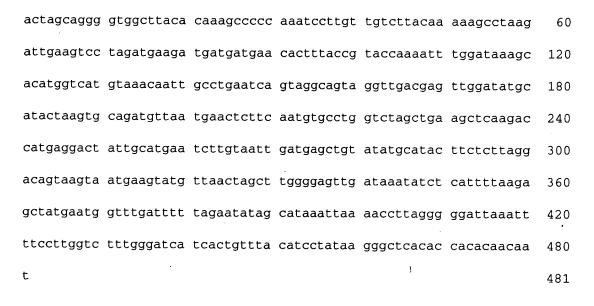
| acggacaaca | tgaacccacc | ctttggccct | attaaccccc | : acagaaggtc | taagcctggg | 1020 |
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| agtgcctcca | | | | | | 1030 |
| <210> <211> <212> <213> | 6562 1768 DNA Glycine ma | x | · | | | |
| | unsure at 6562 | all n locat | ions | | | |
| accatgtcgt | cgtncaaact | ccagtntagc | cgtngcnagc | aaaanangcg | ntcgctgtga | 60 |
| gccaccnagt | nncnnttcct | nacntacatc | tnagtcagca | cgtgcttctt | anntaatcan | 120 |
| tnnaccgtaa | acgntnannt | aaaanntccc | ctanattatt | anntacatca | aatannntcc | 180 |
| gnnnçccgan | nttgananta | ncaaattacn | ntncttcatn | ntantannac | gggcnaaaaa | 240 |
| nnannnntnn | nnnannnnnn | nnnnnnnnn | nnnaaatcag | gannnnnatt | aggtatntgn | 300 |
| nanccccnac | ttttcgccca | nngnnaannn | ncccennnen | naagnnnagn | nnnncngnna | 360 |
| cnnncctagg | anncagnggg | gncnantctg | ngccannang | ggccncntnn | tgggcnacan | 420 |
| naaccccccn | ancannatag | gggcnctnnt | ccacnnccna | ncanntnann | atatnaangn | 480 |
| aaagcaggga | agnngactan | aanattttct | nntcntnata | aatgcnntnc | ggcgtncnnt | 540 |
| ncncaactaa | aatnataann | aaccccctgt | cccctgcgc | gtctgcctta | ngaaaaatac | 600 |
| ganccntcaa | ctnattaaac | angaacaaan | anagcgtcnt | ggtcgtctnt | tcccaacgag | 660 |
| tgtcnccaca | tncntctgga | ngtaggccca | naaaccnctc | cgagnatggg | ggtgcgacna | 720 |
| caaaactatg | gataggaaga | aaaacctcat | tagcttggct | tctacacagg | aaatnacaan | 780 |
| tcaaaccnga | aaacagaaaa | gnangatctg | tcntnntgtg | tctttcttaa | agaacatata | 840 |
| cccatacggg | aaaaggaaca | acacaaagtc | gggtnctctn | tnctctgggg | cgggtngaáa | 900 |
| acatncgctc | aacatactcn | cccctccttc | tccttcttct | ggtnaggaag | gnatnaanan | 960 |
| aantncnncc | nacttttcta | aaaacccaca | angnagaatn | gnntggcgtc | ntcgggcacc | 1020 |
| nnctctcggt | aaaatncnca | tccatgccaa | aaataggtgn | taggcnncct | catcaaacag | 1080 |
| aacnanatac | cccncntntn | ntntgggggg | tgncgtctta | taaaaataca | cctccccaca | 1140 |
| tntcntaacc | aaaatacgtc | acaagtggtg | gcggcctctn | ttgggcgccc | ccccactatn | 1200 |
| agagacncag | ttcnntcttt | aaccanaaga | ggtgttgccc | agagaaacct | ctntcgcgta | 1260 |



| aacaccggaa | gctttttgaa | caattcaaat | ggtcataact | ttta | | 404 |
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| <210> <211> <212> <213> | 6565 932 DNA Glycine ma | × | | | | |
| <400> | 6565 | | | | | |
| tccgcttcaa | cctgtttgaa | tcctcttttg | ccttctacct | agtctttcat | atctaatcca | 60 |
| tctcctatta | tgcaaccccg | ccccaccgtg | atttgaatcc | atcccattcc | caggcaccct | 120 |
| aaagacaacc | gcagcctgcc | agctttatgg | ggaaaccaaa | gggaatcaaa | agtgtttttg | 180 |
| atgataccat | gatggataca | aaacattaat | accaagggga | tgaccaaacg | ctcaaagaac | 240 |
| caatcaaaaa | ccacttaagg | gaaataaaga | acaattcaag | aaccacctca | agggaatcaa | 300 |
| gaacaattca | agaattcaag | ataggaatca | agaagaattc | cagactcaag | aaaaaaattt | 360 |
| agaagtcaga | atcaagattc | aagggttaag | aatctcaaaa | tccagatcag | attcaagact | 420 |
| caagattcaa | aaatcaagag | aaggcttaat | caagaaagta | taaaagtttt | ttctcaaaaa | 480 |
| ttgagaacca | catgattttt | ttcaaaacaa | gttaaccaaa | gaatttttac | tctctgggaa | 540 |
| atccaatacc | caaattgtgg | caatcaataa | caagctacaa | aaatggtttt | aaaaaagttt | 600 |
| tcaaaatgac | ttaccaccgt | cccacataat | ttcaaaaaac | ttggatataa | atttcaaggt | 660 |
| cttgtcgctc | atactactcc | aagtacgttc | aactgacatt | aattttattg | caatgatcct | 720 |
| tagctaataa | ccctactact | gatacccctc | tacaaatact | actcatcgta | taacgtattc | 780 |
| taacctaccc | ctcttcgtca | gtactccgca | tcttacacat | gcctctctac | atcaacattc | 840 |
| cgacttctac | tcagaccgca | ctacaatcat | cacaactcaa | caccactcta | ctattccata | 900 |
| tacagcccgt | cattaacccc | gtctacactc | cg | | | 932 |
| <210> <211> <212> <213> | 6566 598 DNA Glycine max | : | | | | |
| <400> | 6566 | | | | | |
| cttgaatcag | ttgaacattt | cccaacaagt | tcataaccca | acagcttatc | aagtgcttcg | 60 |
| ggtgaaacat | ttaaatcaat | atcaccatcc | ttgtgaaaag | aaaataattg | tatcacacaa | 120 |

<400>

| accaaaaata | a acatatcaaa | aataaaaagt | tacttttgaa | tccaaaaacg | gacttcaatt | 180 |
|----------------------------------|-----------------------------------|-------------------|------------|------------|------------|-----|
| ttaagcttat | taactgcatc | agctgattga | ccaattaatt | cactgcattc | acggtcccaa | 240 |
| agcaggaatt | ttgtgctttc | atctccgtgg | ttgaacatca | cctcaagcct | atacctgcta | 300 |
| ccatatgtac | : caatagtgta | aaaaatataa | aggtatgaag | aatacacaac | attttaaaag | 360 |
| atcgcaatga | cctaagcaca | acttccttat | tgtattttcc | gcatgcacat | gtgaagggcg | 420 |
| ccatctctgg | atcaçttett | tttatgaaac | tgaatgcaag | ttgtataaca | ccatgaatga | 480 |
| ttgtccataa | caatcatagt | aattgggcca | acagttacac | aaacaatttc | ttgggtgaaa | 540 |
| caacatacac | ttcaaatgct | gaaaaaaact | tggcttgggg | aagggtaaag | aattaaaa | 598 |
| <210> <211> <212> <213> | 6567 556 DNA Glycine max | k all n locat: | ions | | | |
| <400> | 6567 | | | | | |
| agcttgtata | accatgtcta | gatatgaagt | tattgaaaca | atcaagaatg | ttcttttaat | 60 |
| gaatattggg | gctcttatac | caatattgag | aaggaaataa | taacattata | ttctctaaca | 120 |
| ccttttgaca | cactttttta | tttggtgaaa | ttgatgtaag | tctcactaaa | tgagactcat | 180 |
| ttcttatttg | gcgcatctcc | ttttaaacta | gtggaattca | aataaatttt | aaccaatatc | 240 |
| agaagagagt | ctattagaaa | gagaattata | attatgttac | acgaggctga | agtgccctga | 300 |
| atagcagact | gataaaagac | aagaaatttt | gtttgcaggt | acttactcct | tcgtactcac | 360 |
| tccaaggagg | ctttccccgt | gaacatttca | ataattgtac | aacccanact | cccaatatta | 420 |
| acagcgaaag | ccaggtcaga | gctgttatct | ttttgcacaa | ccgcttgaaa | aagctgcatg | 480 |
| tatgaggaat | aagtgtctat | agagaacgca | tgagacatcg | cggagttata | gagttataaa | 540 |
| ccttaataga | tatacc | | | | | 556 |
| <210> <211> <212> <213> | 6568 481 DNA Glycine max | | | | | |



<210> 6569 <211> 936 <212> DNA <213> Glycine max

<223> unsure at all n locations

<400> 6569

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| cgacccgaac | cgattccgta | cggatacggg | ggaaacactt | cccacgcaga | tagaaagtcc | 900 |
|----------------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| acttcggtct | cgatccccac | acgggccgga | taaccg | | | 936 |
| <210> <211> <212> <213> | 6570 435 DNA Glycine max | ĸ | | | | |
| <400> | 6570 | | | | · | |
| ctgccaactt | attcaaaaaa | aagtttattt | ttatttttt | cctaatgaac | atggggctaa | 60 |
| cctcggggtc | aaactaatgc | cggtcatgtc | tttttggttg | ccagggcaaa | tggatatttc | 120 |
| tttaattcag | ggttaagaat | attgattttc | aacgcagaac | aaggatactc | cacactccct | 180 |
| ttttgttgtt | ccaaaccaat | ttgtttgatt | aagtgaactt | gtaattttac | cgagaaatgt | 240 |
| tttacttttt | cttctttcat | aattttggat | ggaaaaaaat | attccgaatg | taattaccat | 300 |
| tcagtaatga | ataacagctt | tgccaacgcc | agctgggtac | acccacattt | ttctgcatgc | 360 |
| ttggatccgg | tgactccgtt | aaatacactc | tgtacttgaa | ttgaaataat | tccctgggga | 420 |
| gaataccttt | aaacc | | | | | 435 |
| <210> <211> <212> <213> | 6571 469 DNA Glycine max | | | | | |
| <223> <400> | unsure at a 6571 | ll n locati | lons | | | |
| agctattcct | ctagtngctc | tgatagggtt | tcctagtcat | tatatagaaa | gagaatggat | 60 |
| tggagcctca | attatattgt | ctctgtgcga | ggggcatttc | tttctctaca | aacattattt | 120 |
| tgcacatccc | aacggtggga | atatgcggaa | atgagttccg | aatgtggtga | ccaaattcta | 180 |
| tgatgctcca | atggttaatg | aatatgggat | catactttta | cttacacaag | tttgggtgta | 240 |
| tgcatgtttt | gggagaggaa | gaagcgataa | ctaanttgag | aggaagaaag | agcgcataga | 300 |
| cgtatccgat | gtgtcaaaac | tgacctaatg | tgtccattta | taactatgag | accgagtcta | 360 |
| ctatatatnc | tatctgttgc | tataattaat | tactncataa | aaagagagct | ctattatact | 420 |
| atatataaaa | tacataaata | taacatooto | ttatgttcta | | | 160 |

| <210> <211> <212> <213> | 6572 371 DNA Glycine max | |
|-------------------------------------|--|------|
| <223> <400> | unsure at all n locations 6572 | |
| agctagttc | t tgattntttc taagttcttt aacaagctnt gaacaatata cttgcccttc | 60 |
| atttaactgt | ctntgcgctt ggcggccccg ctcaacaaag tactttcgac acctactgta | 120 |
| cgttgattta | a accaatgctg ttatgggaat gttgcgacaa tccttcaaaa ccttattgat | 180 |
| acattctgag | g aggttggttg tcatgtggcc atatcgacgt ccttctctat cataagccat | 240 |
| cgtccatttt | tcctttgaaa ttcgatcaat ccatgtggct atggctggac tcagttcacg | 300 |
| aaaaatttto | taaatttgat caaaaatgtg cttgcaagga gtgtacgctg cataaaatta | 360 |
| gttatgaata | a a | 371 |
| <210> <211> <212> <213> <223> <400> | 6573 204 DNA Glycine max unsure at all n locations 6573 | |
| | tccattntaa aaagctttct tctcattttc cactttttcc tgcggcattg | |
| | gtgggggtag caaggttgag tgcagcggtg aaggtgaagt ttccggcgtc | 60 |
| | | 120 |
| | gtggtcggtg gcggcaaaca aggtacgcag atggcgtttg ttcgtcgcgg . ggcttccgga tcaa | 180 |
| | | .204 |
| <210> <211> <212> <213> | 6574 442 DNA Glycine max | |
| <223> <400> | unsure at all n locations 6574 | |
| agctagagtt | gtgtttgtga tctttgaaac tctcttgatc attgcaagag tttagagatc | 60 |
| tcatgcttta | ggtgaccctg acataaaggc actacgattt tttttgttgc cttaatgttt | 120 |
| gtttttttt | tggtatttta agagtcaaaa tgggtgaaaa gtctttattg gtatatgaat | 180 |

| | | • | | | | | |
|---|----------------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| | tattattttg | ctttcttgct | ttctgcttat | tctcttgttc | ttgtttgcat | aatttgatga | 240 |
| | actagatctc | taatgtttaa | cgattaatga | aactccaatt | tcatgattta | cattaaatta | 300 |
| | aaaacagctt | gtacatgtga | aacaatgaac | ttggttagct | aatatctcta | aatctcgcta | 360 |
| • | ttttcatatt | ntaagaggca | cgagcttcag | aacacttcca | tagttttnnt | ttttttttg | 420 |
| | cttaccctac | caaacaatga | tg | | | | 442 |
| | <210> <211> <212> <213> | 6575 493 DNA Glycine max | ς | | | | |
| | <400> | 6575 | | | | | |
| | agtcacctgc | ggcatgcaag | cttcttctcc | aatattttat | aaggactcag | taacatggag | 60 |
| | agaagtatga | caaatgctgc | cagtggtgga | gccttaggag | acatgactcc | tgctgaagcc | 120 |
| | agaaatttaa | ttgagaagat | ggcttccaac | tcccagcaat | ttagtgccaa | aagtgatgtt | 180 |
| | attgtcatta | gaggagtgca | tgaagtaacc | acaaattcat | cttcatcagc | cgagactaag | 240 |
| | aaacttgaag | gtaaactaaa | tgccttggtt | aacctggtaa | cccaactggc | cgtgaatcaa | 300 |
| | aaatctgcac | ctgtcgacag | actctatggt | ttatgctcct | ctgcctacca | ccacacagac | 360 |
| | ctttgccctt | ttgtgcaaca | atctgaagca | attcaacagc | ctaaagctta | tgctgcaaac | 420 |
| | atctacaata | gacctcctca | acctcagcag | caaaatcagc | cacaacaaaa | caattatgaa | 480 |
| | cctctcagca | ata | | | | | 493 |
| | <210> <211> <212> <213> | 6576 425 DNA Glycine max | | | | | |
| | <223> <400> | unsure at a 6576 | II n locati | ons | | | |
| | agcttgtcag | aataacagta | cgtgtgatgg | tatattgaga | ggcatggata | agtatgcaga | 60 |
| , | atatactgct | gaggaaagaa | aagaagaaaa | ctatatatgc | ataattattg | tcttaaccaa | 120 |
| • | aggcttttgg | catcacaacc | actggcatga | taacttatgg | tgattattac | tatgagtcgc | 180 |
| (| ccacgagggg | atgacgaaat a | actaatcata | ttagagcttt | tcaattgctc | tcaccatttc | 240 |

| aaattatcag | ccacttttat | ttcatagttt | ttgttactnt | aaaaaaataa | tgatgacttc | 300 |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| actttaacag | tttaactctc | ttgataacga | tattntagtt | aaaaaggact | attttataat | 360 |
| agtaatcggt | gttattaaaa | atagttaact | ctcatcttct | ctgtagatgc | gggtttaatt | 420 |
| ctcct | | | | | | 425 |
| <210> <211> <212> <213> | 6577 439 DNA Glycine ma: | | | | | |
| <400> | 6577 | all n locat: | ions | | | |
| gacaagtggc | ctcagatatc | ttaagaagnn | nggggnnggt | gtcttnnncc | tttggccncc | 60 |
| ctccttatct | tcgccccttt | tacacctact | gtgccgtgat | ttaaccaatg | ctgctattgt | 120 |
| aatgttgcga | ccactcttaa | cctctcttat | tgataccttc | ctcagagggt | ggttagcacg | 180 |
| tgcccatctc | aacctccctt | tctattaata | gccctcttca | cttctcttcc | tcatatcgaa | 240 |
| tactccttcc | gtaactgggt | ctactcaagt | ctccaacatt | ttctaaaacc | ttgtaccaaa | 300 |
| ttctttctca | ccggcttgct | ctgcacataa | tttattttct | actaatgtct | tcgtacccct | 360 |
| tctcctcaat | gtcacttttc | tttcccttaa | ctattctgtc | tctcatagac | gcacccttgg | 420 |
| gtcttactca | tacgccccg | | | | , | 439 |
| <210> <211> <212> <213> | 6578 371 DNA Glycine max | : | | | | |
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| agatgagagc | tatgaccatt | tgaatttctc | gaaagcttgc | ggcgttgaag | ttcaagcgtc | 120 |
| tcgatatatt | atgcagcgtg | aatcggatgt | acgcagggag | aagttgggac | catatggatt | 180 |
| tttagagtgc | ttccgttggt | caatatcgag | cggctcgaga | tattatgcgc | ctgaatcgga | 240 |
| cctccgagat | agaagtcatg | accatttgaa | ttcctcgaga | tgtctcgttg | ttcaatttag | 300 |
| agcgtctgga | catattatgc | acttgactcg | gacctccgag | tgaacagttt | gaccatttga | 360 |
| atgctcaaga | g | | | | | 371 |

| <210> <211> <212> <213> | 6579 294 DNA Glycine max | ĸ | | | | |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| <400> | 6579 | • | | | | |
| agctttaact | cggaggtccg | attcaagcgc | atatatatat | cgagacgctc | gaaattaacc | 60 |
| aacggaagct | ctcgagaaat | tcacatggac | ataactctta | actcggaggt | ccgattcatg | 120 |
| cgcataatat | atcgagacgc | tcgaaattga | acaacggaag | ctctcgagaa | attcaaatgg | 180 |
| tcataacttt | gcacacggag | gtctgattca | ggcgcataat | atatcgagac | gctcaaaatt | 240 |
| taacaacgga | agctctcgag | aaataccaat | ggtcataact | tttcactggg | atgt | 294 |
| <210> <211> <212> <213> | 6580 424 DNA Glycine max | ς | | ı | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| agcttaacat | gtagagattg | gaacacatca | tcgatagtat | cccaacaggt | atgtgttcgg | 60 |
| ttctgcaagt | taaggaggat | gaagtataac | ttctcaatgg | ttcttttgaa | naattgcatt | 120 |
| tgcaggtgca | aganagaaaa | gtactaccta | tataagcatg | aagtttagcc | gcttcaagaa | 180 |
| gctgggactt | ggctttgata | tgcttatgaa | ggatagggac | acaggctagt | aaaactatgt | 240 |
| gtcgagcaag | agtaatgcta | taaactattg | tgcagattat | cttcatgtat | tcattatgaa | 300 |
| tagaaagggt | tcaatcctta | gtgacaccct | gatattcgaa | tatttgaaac | gtgtaatttg | 360 |
| ctaagatgaa | attcaatcgt | cacgatattt | catctatgca | gtagtttgtt | gtatgttatg | 420 |
| actt | | | | | | 424 |
| <213> | 6581 418 DNA Glycine max | | | | | |
| <400> | unsure at a 6581 | | | | | |
| agctntaagc | ataagcaaac | tgttagtcgt | cttatacagc | taactgtggt | atagaaaact | 60 |

| nttacaaaa | t ataostotti taasaa ka | |
|----------------------------------|--|-------|
| nccacaaaa | t gtacatattt tccccaattt atggttcttt ttgtaggatt gtaaataaa | t 120 |
| tttgctctt | t cttatctggg ctcagtagac gccttgtgta tggaattaat gtcaatttc | a 180 |
| ggcaaaaag | g agttattttg aagaagtgtt aaagttgatg tctcattaag cgagctcaa | t 240 |
| gcgcttagc | g agtgttatcc gctaagtgag gcatcagcgc gcttagcgaa taggaggaa | t 300 |
| ctggaaggg | a atatgtcacg caggcacgcg ctcagcgcgt cattagctcg ctcagcgag | t 360 |
| cgtttgtca | c cttccaggct tagcacgagt ttggcattga gcgaaaatca cttactca | 418 |
| <210> <211> <212> <213> | 6582 229 DNA Glycine max | |
| <223> <400> | unsure at all n locations 6582 | |
| atgaatccgt | tgtacacagc gattacatca ganttctaat aatctattag ggatctact | t 60 |
| taatgagaga | a tttgaateet eatatgggaa taatattgta gttgetgaat etgeetaegg | g 120 |
| aatactgact | accactatgt cttttctctt tcttttccat taagacatat gccacatcac | c 180 |
| ataaatctta | gactagette gattetgata tattgegace ateacetae | 229 |
| <210> <211> <212> <213> | 6583 317 DNA Glycine max | |
| <223> <400> | unsure at all n locations 6583 | |
| agcttcacat | gaagctacat catttactcc ctatcaaatg aatgaataaa acattctttr | 60 |
| tattttctta | gaaaatatat ttattttatt taccttaaaa ctattatttt aattaataaa | 120 |
| actatttctt | cttatttatt taattacaac aacatcatta ttttctaaaa ctctatttat | 180 |
| tttaaaataa | aattetttt aatttatttt acaaaaaatg aggtgttaca aagtatatte | 240 |
| tagaaagact | tttatggggg taattttaca cctctccttg gttctcgact ccatttgtga | 300 |
| ctctatgctc | tctttct | 317 |
| <210> | 6584 439 | |

| | | • | | | | |
|-------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| <212> <213> | DNA Glycine ma | x | | | | |
| <223> <400> | unsure at 6584 | all n locat | ions | | | |
| agcttgtatg | agtactgaga | aagattcaag | aaattgtgtg | caagctgtcc | tcaccaccag | 60 |
| atttctaagc | aactccttct | tcaatattta | tgtgtgggac | ttagcaacat | ggagaggagt | 120 |
| atgattgatg | ctgccagtgg | tggagccctt | ggagacatga | cccctgctga | agccagaaat | 180 |
| ttaattgaga | agatggcttc | caactcctag | caatttagtg | ccagaagtga | tgctattgtc | 240 |
| attagaggag | tgcatgaagt | agccacaaat | tcatcctcat | cgggcgaaac | taagaagctc | 300 |
| gaaggtaaac | tagatgcctt | ggttaacctg | ntaacccaac | tgaccatgaa | taaaaaatct | 360 |
| gcacctgcca | ccagactctg | tggttatgct | cctctgctac | caccacatct | acctttgccc | 420 |
| ttctgtgaac | attctgaag | | | | | 439 |
| <210> <211> <212> <213> | 6585 490 DNA Glycine max | x | | | | |
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| agtcacctgc | ggcatgcaag | cttcattcta | cacctgaaaa | agaggatgag | atagttgcac | 60 |
| aaaggagaaa | gcttcctaac | aaaaattttc | atgcaggtgg | accttcttct | agtaattcta | 120 |
| acttaccgca | gcctcctatc | cctcttccat | tcccacctag | agcaattcta | gacaaaaaaa | 180 |
| tggaagaagt | ggaaaaggag | atcttggaga | ccttcaggaa | agtagaggtg | aacatacctc | 240 |
| tgctagatgc | catcaagaag | attctaagat | gtgccaagtt | tctaaaggag | ttgtgcaccc | 300 |
| acaaaaggaa | gctcaagggc | aatgaaagga | ttagcatggg | cagaaacgtg | tcagcattga | 360 |
| taggtaaatc | tgttcctcac | attcttgaga | aatgtaagga | cccaggtact | ttctgtatac | 420 |
| cttgcattat | tgggaacagt | aaatttgaga | atgccatgct | agatctagga | gcatcagtta | 480 |
| gtgtcatgcc | | | | | | 490 |
| | 6586 479 DNA Glycine max | · | | | | |

| <223> <400> | unsure at all n locations 6586 | | | | | |
|-----------------------------------|-----------------------------------|---------------------------------------|------------|------------|------------|-----|
| agtcacctgo | ngcatgcgag | cttacacaat | ttatctttct | caaacttgag | tttcgaaagg | 60 |
| ccaagtatga | agtettteet | aactagatga | ttgagatgat | gcatgtgtat | gtgtgtagtc | 120 |
| ctatgatgtc | acaaccaaga | atcatctatc | ttaattatca | gacaactcat | ctcatgagat | 180 |
| gatgaatgct | caatgtttaa | catattgata | ttacctattc | tcttgccaat | atggacaacc | 240 |
| tcaccggaca | tagcttcact | aataagacaa | cgattcttac | tgaattcaat | tttgaagcct | 300 |
| tagtcacata | gttgactaat | gctcaggaag | ttatgcttta | gtccatccac | atagaacatt | 360 |
| ctttatctgc | gttgtgacta | atttccaata | tttccttctc | ccattatctt | tactttattg | 420 |
| gtgtctcctg | tcacaaccta | cccttcggcg | ggagggcgac | gcgagactca | cgtgtgcat | 479 |
| <210> <211> ·<212> <213> | 6587 391 DNA Glycine ma | × | | | | |
| <400> | 6587 | | | | | |
| catgcaagct | tattcaaggt | ctaaaacttt | catagagcag | ttcactcatg | tcatgcaatc | 60 |
| aatttatttc | agatcaagat | atcaagacaa | acaaaatcta | ctaaaatgtt | caaaacgtag | 120 |
| ctaccataaa | agcgctaaac | caaaaccact | gttaaaccaa | aaaccaacat | aataaataaa | 180 |
| agttgtctga | aaagagggag | aattaaatga | aatcctggtc | aatcatcaat | cttgtgctgg | 240 |
| tgtgggccat | gggtcccaaa | gcccctgtgt | tgcggtgaca | tctactacat | aattagtgtc | 300 |
| catgcctgcc | ttcgctgcac | ctgtgtcctc | ttcaacctct | tgtgctggat | actgagtctc | 360 |
| tggagtgtcc | tcagcatcct | gagcctgtgc | a | | | 391 |
| <210> <211> <212> <213> | 6588 426 DNA Glycine max | · · · · · · · · · · · · · · · · · · · | | · | | |
| | | | | | | |
| | | aagtgtaaat | | | | 60 |
| | | aatgtatttt | | | | 120 |
| cagaatgtaa | gcaagtattg | aaaactcaca | ttcccattac | taacttctag | agtgctggca | 180 |

| ttctccttca | ccagccgtgt | actagatctg | ggatctcctc | tttcattgta | aaaagttata | 240 |
|-------------------------------------|--------------------------------------|-------------------|------------|------------|------------|-----|
| ttaccatcta | attctgtaac | ctctcgtgat | acctgatgtt | gtggaggttt | ccatgtattt | 300 |
| acattaacag | aaatattcac | tatcttatga | gatgtgttgg | gtgatgctgc | aagttgctcc | 360 |
| tgttctcgat | tccgcttttg | gcgcacacta | tcatcaacaa | tttttgctac | actatactgc | 420 |
| accatc | | • | | | | 426 |
| <210> <211> <212> <213> <223> <400> | 6589 458 DNA Glycine max unsure at a | x all n locat: | ions | | | |
| · · | | aatgacaaan | attacttctc | ttettattet | catagagttc | 60 |
| | | | • | | attagtttca | 120 |
| | | | | | caaaaactca | 180 |
| | | | | | aaaataaatc | |
| | | | | | | 240 |
| | | *. | | cccttcgatt | | 300 |
| | | | | acanaggttc | | 360 |
| tgctngcaca | ttgaagcagt | actcatgctg | catagtgtgt | catttggcat | gaagcgttca | 420 |
| agtgatttaa | caaaagctat | cgtacagtgg | tgcttata | | | 458 |
| <210> <211> <212> <213> | 6590 614 DNA Glycine max | ζ | | | | |
| <223> <400> | unsure at a | all n locati | lons | | | |
| ctaccttata | nctnctatca | ctagcttcnc | gcgnnntanc | cngcgactcg | ncgctaaant | 60 |
| annttttntn | nnnnnaagt | aannnnncga | gtgttgaacc | tganacanct | aganaccgtg | 120 |
| atcctctacg | tcgacccgag | gcatgcnagc | ttatgatact | tgataatgtt | atcttactaa | 180 |
| ttgtggntat | ttgatttttg | tattaatttc | ttttataata | aactcacccc | tcgcaattat | 240 |
| tgtaccgcgt | ggctggtact | tatgatgatc | gcaaactttt | attcgtggga | gcacaatgac | 300 |

| agtagtagag | tgcgagaagt | gagattcttt | tgttgagccg | ccgagccgac | gtgatgatgt | 360 |
|----------------------------------|-----------------------------------|------------------|------------|------------|------------|-----|
| tggtattatt | ttgggagaga | gttgtgttat | gttaatcaac | tcctacatag | ctagttccat | 420 |
| aattattttg | ttgaatcgag | gaagtaaatc | acacatttaa | ttataagtat | gaacaaattt | 480 |
| actttacact | atgtgaatga | tgtgtgcgga | gttactatac | caagatatat | atatatatat | 540 |
| atatatatat | atatatatat | atatatatat | atatatatat | atatagatac | atatatatgt | 600 |
| atatttacat | atcn | | | | | 614 |
| <210> <211> <212> <213> | 6591 422 DNA Glycine max | x all n locat | ions | | | |
| <400> | 6591 | arr in rocue | 10113 | | | |
| agcttgctat | tggaatcgcg | aaagcttcac | tccttcatca | ggattagtac | ctgacatccc | 60 |
| aaacaaacaa | atcaaacgta | tcaagacaag | tatatgtgct | gtttgaatac | ctcacccgct | 120 |
| caagtgtatc | acacactgat | ggcttttctt | taatgaaaca | ctctttcatt | ttaccactct | 180 |
| aattcccctc | gagttcttag | gcaatacaag | agattatggt | cacaccaaag | aacaattcac | 240 |
| caatatgtgt | aaggtttggc | tagagagaca | aggaaaaggt | taaccaagaa | aaggctaaca | 300 |
| atgtgtttat | gcacaaatga | atgaaataaa | attcacaagt | tatgaattca | agtaacaatc | 360 |
| ctccatgcaa | ccattatatt | accttataga | gatttttgnt | aaagtttttc | aagcatgaac | 420 |
| ca | | | | | | 422 |
| <210> <211> <212> <213> | 6592 469 DNA Glycine max | C | | | | |
| <400> | 6592 | | | | | |
| agcttagaca | tgactataat | ttactggcat | ggtatgcata | tggcctctga | ggcatgtact | 60 |
| ggacctggca | tagataactt | ccggctgcta | aaatagcatt | aggaatgaga | gtgattgttt | 120 |
| ctaatactct | gatatgttga | atcttaacct | gcattctatt | gaagttaaca | agcacaagtt | 180 |

ctctttgaac agtgctgggc tgttctagaa atgcaaatgg gaaatatcag gagagcaaaa 240

| gagttgtttg | atgctgccac | ggttgctgat | aagaggcatg | ttgctgcttg | gcatggatgg | 300 |
|-------------------------|-------------------------------------|-------------|------------|------------|------------|-----|
| gcaaatctag | aattaaagca | aggaaatcta | aagaaggcaa | ggattctact | tggtaaaggt | 360 |
| cttcaatatt | gtggacagaa | tgagtacata | taccaaacac | ttgcacggct | tgaagctaga | 420 |
| gcacatacat | atcagcatgc | tcgatactta | ttcaatcagg | ccactaagt | | 469 |
| <210> <211> <212> <213> | 6593 264 · DNA Glycine ma: | x | | | | |
| <400> | 6593 | | | | | |
| gatctcaagt | cacctgagca | tgcaagcttt | agtcgtgtgt | gggtaatttg | atcactctct | 60 |
| cactcttgtt | ctgaactatg | tatatgtgct | aataacaagg | ctatgagcgg | ctgagacaaa | 120 |
| aaatctccgc | aactgtctat | actccttcag | ccatgacgct | ctggatgtac | atcaatcggt | 180 |
| atcatcttta | catgaacttg | caaaaatcta | gtgccgtatc | agactcacaa | tcattcagat | 240 |
| gtacaatatc | ttattattac | cacg | | | | 264 |
| <210> <211> <212> <213> | 6594 244 DNA Glycine max | ζ | | | | |
| <400> | 6594 | | | | | |
| agcttgtagg | ccttggatct | tcttcatcaa | tggagtcctt | tgcttcttga | agatcaatga | 60 |
| caatggaatg | gagaaggagg | aaaggtgatt | ggagactcca | cttcaaggag | aagataagtt | 120 |
| gagaacaagc | tcaccaccat | aggaagccat | ggataagagc | ttgaaggtaa | gagaagatga | 180 |
| gtagagggag | agaagaggga | gaatgaggtc | ttaactttga | agtctaattt | ctcaaatcat | 240 |
| caaa | | | | | | 244 |
| <210> <211> <212> <213> | 6595 279 DNA Glycine max | : | | | | |
| <223> <400> | unsure at a 6595 | ll n locati | ons | | | |
| agctntacac | caaacttgaa | acaatccagt | attctttgtc | ctagtggctc | taaacaaatc | 60 |

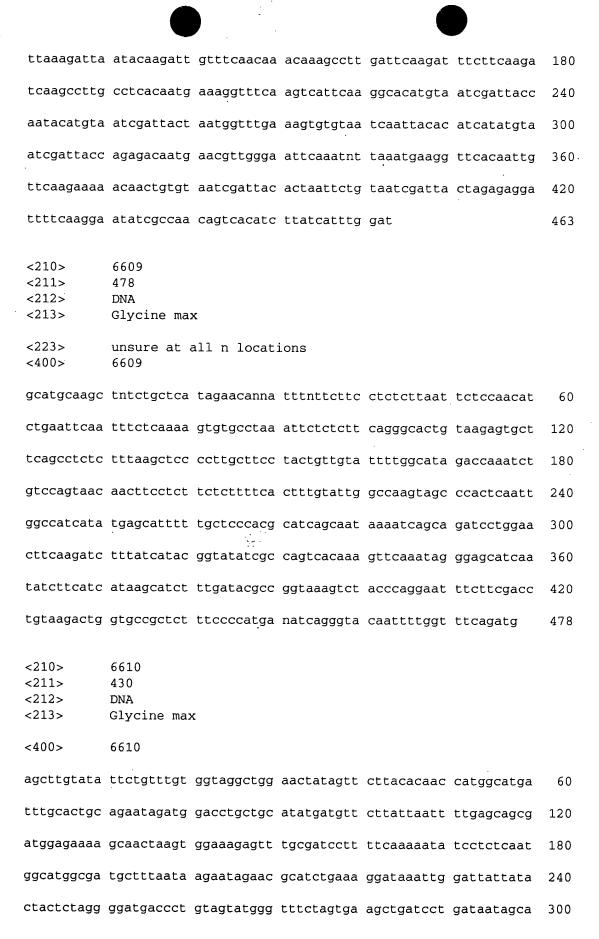
| anaagaattg | agggttgttt | gctcactgac | taactcttaa | ttgtcttata | gatagatatg | 120 |
|-------------------------------------|--------------------------------------|------------------|------------|----------------|------------|-----|
| aaatctaaac | acttagtctt | ttctctcaag | atgtacaaag | tgtttcgaga | ttgtttcaaa | 180 |
| ctntacaaga | atatacaaaa | aaactttta | cataaagaat | ttgaacgata | gcacgcaaaa | 240 |
| atgtgtctta | ggtctttaaa | gcttttggta | ttcataggc | | | 279 |
| <210> <211> <212> <213> <223> <400> | 6596 204 DNA Glycine max unsure at 6 | x all n locat | ions | | | |
| | | ttatataaaa | 22244222 | at a at the at | | 60 |
| | gttccctttt | | | | | 60 |
| | ggtggtggcg | | | | | 120 |
| agtggggtgc | tactgcccac | aaccatgctt | gatcaattcc | ggcctaaccc | aggcataatc | 180 |
| agtcagtgag | aacctgtgac | gtac | | | | 204 |
| <210> <211> <212> <213> | 6597 259 DNA Glycine max | τ | | | | |
| <400> | 6597 | | | | | |
| agcttctccg | gtcaatgtca | gaccgtaccg | ataccctcat | tatcagaaac | aagaaattga | 60 |
| gaatcaggtt | gatggcatgt | tgcagcgagg | cttcatacaa | ccaagcacaa | gcccgttttc | 120 |
| ctcacccgtg | ttgtttgtca | agaagcacga | taggtcttgg | cgcttatgcg | tcgactaccg | 180 |
| tgctttaaat | gctttgacgg | cgcatgatca | gtttccaagt | gcgactgtgg | atgaactctt | 240 |
| ggacgaatat | gaggcgcca | | | | | 259 |
| <210><211><211><212><213> | 6598 75 DNA Glycine max | v- ´. | | | | |
| <400> | 6598 | | | | | |
| tataatcaca | taaggcttac | tctcatattc | aatcattggc | ttgataaaag | tgttccatgg | 60 |

| aggaatttga | cgagt | 75 |
|----------------------------------|--|-----|
| <210> <211> <212> <213> | 6599 342 DNA Glycine max | |
| <223> <400> | unsure at all n locations 6599 | |
| tgcagctata | atcctttctg agtgactcat ggcaaccctg agtttactta aattattgtt | 60 |
| ctttacagaa | tttctttntg aatacactta agcaaactca taaatagtca taaactcaga | 120 |
| agacttatga | tttatgttta gaaggtttgc cataattaaa acaccaagga atttggggtc | 180 |
| aacaaaaacc | tcttgtgcca tagcttagaa tcaagctcag tcttactaca ttgcactcat | 240 |
| gttcagaaat | taaattccaa ttaacaagaa aagttatttt tttaaacaac aagcaataac | 300 |
| cactttgcat | catttgaccc acacttaata ggttctgatc aa | 342 |
| <210> <211> <212> <213> | 6600 324 DNA Glycine max | |
| <400> | 6600 | |
| agctttatat | tttcttacgt gtaggtgact tctcatcatg aaatttatat gtgcaaaggt | 60 |
| tattagataa | ttgaattgac taaaatcatt tgaagaaatt gattgaagct ttattcacat | 120 |
| tgtaattagg | aaattottta atgtotgaga ottogttgaa atatgtttag gatataggta | 180 |
| tacatgtttt | tcatgcaaat caatataagt atataatttt tgattcgtta tatacatatc | 240 |
| atatttattt | aatgatatgt ttgatattat tggtattata tatatata | 300 |
| tatatatata | tatatatgta tata | 324 |
| | 6601 326 DNA Glycine max unsure at all n locations | |
| <400> | 6601 | |
| agcttgaagt | gagaaagcgt ggaagagtca gtcttcctac ttttatttgt tgaccaccac | 60 |

| agagtggtac | ctggagatat | gtcgcggtgg | tcaggagacc | ttgnggacgt | caggtggggt | 120 |
|-------------------------------------|--|-------------------|------------|------------|------------|-----|
| gctattgccc | aaaaccatgc | ttgatcaatc | ccggcccaac | ccaggcataa | tcagtcagtg | 180 |
| agaacctgtg | acgtacctaa | acaggcgagc | tactggcagt | caaccaataa | aagaacaaag | 240 |
| accacaaagc | aaggaggctt | gtgtggtggc | tggccagcta | tggatcttaa | gtggtatctg | 300 |
| gaatttgacc | tctggtaatc | attacc | · | | | 326 |
| <210> <211> <212> <213> <223> <400> | 6602 432 DNA Glycine max unsure at a | x all n locat: | ions | | | |
| agctntagga | gaaaccatta | naactaaggt | agttcctaaa | caaaaatcaa | ttgaggaagc | 60 |
| ttcgccgagt | gtccccattg | aaaaaccttt | attcaaacct | ttcaaagtta | gtgataaggc | 120 |
| taaacgaaaa | attagggaac | ttagaaaaac | taaatcctta | attgaaggcg | taggtgacaa | 180 |
| tcatagcgaa | ttactaaaca | agattagtag | tttgcttaag | gtcattccag | atactcccca | 240 |
| agcttcggaa | aatacttcca | aaatggtaac | aagaagtacc | tncaaattaa | ttaatgttat | 300 |
| taatgaagat | agtgaccaaa | acttagataa | cacaactgag | ataggatcag | tgtcagaaaa | 360 |
| gaatataaat | ccattaaact | ccaaacactg | gaaagacccc | tccaaattat | attatcaacg | 420 |
| tncaactggc | cc | | | | | 432 |
| <210> <211> <212> <213> | 6603 389 DNA Glycine max | | | | | |
| <223> <400> | unsure at a | ıll n locati | ons. | | | |
| agcttctccc | tatttntgct | ataaataggg | gatgaagtga | agaagaaaag | ggttcagccc | 60 |
| cttagacact | tctctctctc | tcgaaatagc | tgaggaaaat | tagttccgtg | aagaaaatcc | 120 |
| aagccgaggc | cgcttcgtaa | cgttttcgtg | agtaattacg | cgaagattct | cgaccgttct | 180 |
| tcaaggattc | atcgntcgtt | cttcgttttc | ttcagtcttc | aatgggtaag | tacctcaaac | 240 |
| caatctttt | aattcattct | atgtacccgt | ggtggtccac | atcttgtttc | atgtatttt | 300 |

| attctcgctt | tcatttactt | tntatacccc | ctnttggcgt | gcttaagcca | tttatctaag | 360 |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| tcatttctca | cttaatctaa | agataaaat | | | | 389 |
| <210> <211> <212> <213> | 6604 402 DNA Glycine max | × | | | | |
| <400> | 6604 | | | | | |
| agcttcacat | ggagctatat | caaagaagaa | gtctatatca | ccacatgatt | caaaaagaga | 60 |
| cctcatatgt | aagttactca | tttataccaa | tttaatgatg | atcatgagga | ccaaaacatt | 120 |
| tcattcacaa | gattagtagg | ctactcaaaa | gtaggttatt | gaagtgtgtt | taaatgactc | 180 |
| gtgttcacaa | gaaaaatatc | agtagggaag | accttaattt | accatacaat | ttgagaaggg | 240 |
| gaacaacttg | tagaaaacat | tatctgacaa | gagattcata | caaatttgga | tcagtaaaga | 300 |
| ataaccctat | cacctatcat | ataccccttt | ggcacaatca | actcattacc | cttctataga | 360 |
| tagcacgatc | atgagaaatt | ctcaggataa | gggatagtct | at | | 402 |
| <210> <211> <212> <213> | 6605 456 DNA Glycine max | ς | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | • |
| agctcgngaa | catgtgtgtt | taggtagaac | atttatgaac | taaaacccta | aatgtgaccc | 60 |
| anacattaaa | tcaattttta | attgatttaa | attaaaatca | aaattaaaaa | tttccctatt | 120 |
| gtcaatgaat | aacaaactaa | aattaaaaat | aacaacgcat | ttgttaagta | tgactctgtc | 180 |
| acatcatcaa | aatgtataga | tggcaagaaa | aacattggca | tgagctacgc | acgtgatcag | 240 |
| acaagtagaa | acttaacgtt | gcaagtgata | gtaaggatga | aaacaatgga | cggaatacaa | 300 |
| gtttggggat | gttgatgagt | ctccatcaag | tttaaggacc | aacaccaaaa | atgttgaaca | 360 |
| gatagaggac | taaacaaata | attattccta | ataataacaa | cacaagtctc | gatcctttta | 420 |
| cataacatat | cttaccttaa | acatatcttt | tcacct | | | 456 |
| <210> <211> | 6606 498 | | | | | |

| <212> <213> | DNA Glycine max | |
|-------------------------------------|---|-----|
| <223> <400> | unsure at all n locations 6606 | |
| atggatcnnn | gnnattagac atgagccctg acncntggaa anccccgtac ttaagtgagc | 60 |
| cgagctgcaa | gctttaatat gttattcatt cagcggacta tctaatgaat tagacacata | 120 |
| gagaccatta | ctacatatcc tatggcactg gaaaacagat gtcacctttc attctgcgtc | 180 |
| actgggccct | ctcactgcag tataatggct tagaccacca atatccaagc acgtatctca | 240 |
| cagcattttc | aataacattt tggaactaca agccactcat atgattctaa caaagccgtt | 300 |
| atcgttatca | cacagtgcat gaacttgctt attgctgtaa gcttatggaa tatattattt | 360 |
| ggattcttct | cgtatcaact tttggacgga gacctatctt acatgaatga atgttataca | 420 |
| cgtgaagtga | cccaccattt ttgatacgta gatgttgagt gataagcaga cacactacaa | 480 |
| atatcattaa | catatgcg | 498 |
| <210> <211> <212> <213> <223> <400> | 6607 205 DNA Glycine max unsure at all n locations 6607 | |
| agctttntcc | aagttaataa aaaccatatg taagtctctn tctttgcttt ggtaactatc | 60 |
| catcaatccc | tgttaaagat aaatgacttc tgttgtagac tttcttggta taaaccaaat | 120 |
| tgattctttg | caattettat ttettateta tgaccaatea ettgttetea taattteata | 180 |
| gtgtggtaat | taacgttgaa agtga | 205 |
| <210> <211> <212> <213> <223> <400> | 6608 463 DNA Glycine max unsure at all n locations 6608 | |
| agcttgatgg | tgttgagaag aaatcacatg tttgtcatca tcaaaaaggg ggagaatgtg | 60 |
| | tacatgattn tgatgatgtc aaaagaagaa tcaaacaagg ctcattntgt | 120 |



| tgttcaggat | ggacaatgca | atcttagttt | tgagtgacgt | cacttgcttg | ctatatttc | 360 |
|----------------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| ttgattgtgg | g agataaatac | tttcattaca | ttgtattcca | accettacag | atcttacact | 420 |
| ccgttgacto | 2 | | | | | 430 |
| <210> <211> <212> <213> | 6611 293 DNA Glycine ma | x | | | | |
| <223> <400> | unsure at 6611 | all n locat | ions | | | |
| agcttgagat | gaggaagtgt | tgaagggtga | aacttcctgc | tnttatntgt | gaccacagag | 60 |
| tggtacctgg | agatatgtcg | cggnggtcaa | gagaccttgn | ggacgtcagg | tggggtgcta | 120 |
| ttgcccaaaa | ccaagcttga | ccaatcccga | cccaacccgg | | tcagtgagaa | 180 |
| catgtgacgt | acctaagcag | gcgagctcct | ggcagtcaac | agataaaagg | aaaacaagac | 240 |
| cacagagcaa | ggaggcttgt | ggtggctggc | cagctgtgaa | ttttgtgtaa | tat | 293 |
| <210> <211> <212> <213> | 6612 454 DNA Glycine max | κ | | | | |
| <400> | 6612 | | • | | | |
| agctgccttg | tcccttgata | tatttgaggg | actcatgatc | actatgaatg | acaaattcct | 60 |
| tgggataaag | gtagtgttgc | catgttttca | aagcccatac | taaggcatac | aactccttat | 120 |
| cataagttga | atagttaagg | gtaggaccac | ttaacttttc | actaaaataa | gcaattggat | 180 |
| gaccttcttg | catcaataca | gccccaatcc | caacatttga | agcatcacac | taaatttcaa | 240 |
| aagatttttg | aaagtttggc | aacgcaagta | tggcggaatt | agttagcttt | tgcttaagaa | 300 |
| cattggaagc | atcttcttgt | ttctctcccc | atttgaaacc | aacatctttc | ttgagcactt | 360 |
| cattgagagg | tgctgccaat | gtgctaaaat | ccttcacaaa | tcgtctataa | aaacttgcta | 420 |
| agccatgaaa | actcctcacc | tcggtcacgg | actt | | | 454 |
| <210>211>212> | 6613 463 DNA | | . • | | | |

| <213> | Glycine max | κ . | | | | |
|--|---|---|--|--|---|---|
| <223> <400> | unsure at a | all n locat | ions | | · | |
| agcttaggtt | ntaggagagc | attcatccat | agataaacct | tcactttttc | attcattcac | 60 |
| atcccatact | ttccttttag | ttagacagtc | agcttaattt | cattattttg | cagcatacac | 120 |
| acttactaat | ttcatttgta | cttacaattt | cttttaaaca | caatatatac | agagatatca | 180 |
| tgtgtatgta | cataaataat | gtgtgtatgc | tatttacttt | gaccatttgc | attcttaccc | 240 |
| agtgcctccc | ccaaatttgg | aacaaattta | ccttgataat | tactccccta | naattgggac | 300 |
| aaatatgttt | tgaatcgcgc | ttcttgtgga | tgatgctctc | ctacaaccta | agtcaaggta | 360 |
| gcaggagata | acattggata | ggctcaaggg | tcaatcaatc | aataattcat | tcaatcaata | 420 |
| attcattcaa | ctcanatggg | gtgcaaggga | taattcattc | aag | | 463 |
| <210> <211> <212> <213> | 6614 518 DNA Glycine max | : | | | | |
| <223> <400> | unsure at a | ll n locati | ions | | | |
| <400> | 6614 | | | gangcannag | . gatgaagett | 60 |
| <400> | 6614 ttgagntctg | acnnettega | aaatccccca | | | 60 |
| <400> cggattagcc nttaataatc | 6614 ttgagntctg tttcatttgt | acnncttcga tttgttatcc | aaatccccca aagcccataa | cattgtgact | tatacttgat | 120 |
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| <400> cggattagcc nttaataatc atcatatatt atatatatat | 6614 ttgagntctg tttcatttgt ggcttatctt atatatatat | acnncttcga tttgttatcc ctttcttcat atatatatat | aaatccccca aagcccataa actgtatatt acatatatat | cattgtgact cctcctatct atatatatat | tatacttgat ctatattcat atatatatct | 120 180 240 |
| <400> cggattagcc nttaataatc atcatatatt atatatatat atataaaccc | 6614 ttgagntctg tttcatttgt ggcttatctt atatatatat tatttcggga | acnncttcga tttgttatcc ctttcttcat atatatatat aacaaaagat | aaatccccca aagcccataa actgtatatt acatatatat tgttcaaatc | cattgtgact cctcctatct atatatatat acaagactat | tatacttgat ctatattcat atatatatct aattggtgaa | 120 180 240 300 |
| <400> cggattagcc nttaataatc atcatatatt atatatatat atataaaccc gatgctactc | ttgagntctg tttcatttgt ggcttatctt atatatatat tatttcggga cagcttatct | acnncttcga tttgttatcc ctttcttcat atatatatat aacaaaagat atagaatcta | aaatccccca aagcccataa actgtatatt acatatatat tgttcaaatc aacctagata | cattgtgact cctcctatct atatatatat acaagactat tatactggca | tatacttgat ctatattcat atatatatct aattggtgaa actgatgccc | 120 180 240 300 360 |
| <400> cggattagcc nttaataatc atcatatatt atatatatat atataaaccc gatgctactc atatcttca | ttgagntctg tttcatttgt ggcttatctt atatatatat tatttcggga cagcttatct catacaatat | acnncttcga tttgttatcc ctttcttcat atatatatat aacaaaagat atagaatcta ttactaaaaa | aaatccccca aagcccataa actgtatatt acatatatat tgttcaaatc aacctagata aagtaaaaaa | cattgtgact cctcctatct atatatatat acaagactat tatactggca ttagtggaga | tatacttgat ctatattcat atatatatct aattggtgaa actgatgccc tgtggattat | 120 180 240 300 360 420 |
| <400> cggattagcc nttaataatc atcatatatt atatatatat atataaaccc gatgctactc atatcttca taacactggt | ttgagntctg tttcatttgt ggcttatctt atatatatat tatttcggga cagcttatct catacaatat gcctcttcga | acnnettega tttgttatee etttetteat atatatatat aacaaaagat atagaateta ttactaaaaa attacagaeg | aaatcccca aagcccataa actgtatatt acatatatat tgttcaaatc aacctagata aagtaaaaaa atatagatct | cattgtgact cctcctatct atatatatat acaagactat tatactggca ttagtggaga | tatacttgat ctatattcat atatatatct aattggtgaa actgatgccc tgtggattat | 120 180 240 300 360 420 480 |
| <400> cggattagcc nttaataatc atcatatatt atatatatat atataaaccc gatgctactc atatcttca taacactggt | ttgagntctg tttcatttgt ggcttatctt atatatatat tatttcggga cagcttatct catacaatat | acnnettega tttgttatee etttetteat atatatatat aacaaaagat atagaateta ttactaaaaa attacagaeg | aaatcccca aagcccataa actgtatatt acatatatat tgttcaaatc aacctagata aagtaaaaaa atatagatct | cattgtgact cctcctatct atatatatat acaagactat tatactggca ttagtggaga | tatacttgat ctatattcat atatatatct aattggtgaa actgatgccc tgtggattat | 120 180 240 300 360 420 |

| <223> <400> | unsure at 6615 | all n locat | ions | • | | |
|-------------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| agcttcgcta | acttgtacat | ttcccaacgt | actcacggga | aagcttacac | aggctgacat | 60 |
| gcacacagaa | ccacacatgc | aatagacaaa | gaanaacaga | gaaaataatt | aaaaagatgc | 120 |
| tatggcaata | ttgcatgact | ttgtatacaa | ggcagatcag | aaaattatgt | agtttgaaca | 180 |
| agtataccaa | tattggccct | catagagtca | tagtacaatt | atgttgtcct | tggcctttgg | 240 |
| gtatacaaca | acttgatgaa | agagaaacga | aagaccattc | cttcactaca | tcgatcttct | 300 |
| caacttgttt | ttattcatgc | atgagttatg | caattcctgt | gaacattaag | ttagagaata | 360 |
| ctgttattac | atacatacat | aaatacatag | ctttgaatct | ttcaaggaaa | atttagtaaa | 420 |
| aagcataaca | ccctaattt | | | | | 439 |
| <210> <211> <212> <213> | 6616 431 DNA Glycine max | x | | · | | |
| <400> | 6616 | | | | | |
| agctatgata | aatcaaggtg | aatggacctc | gttcattgac | atattagcat | tggtggtgct | 60 |
| tgggaccata | ctatacacaa | atgtagacgg | gctagtggac | ttagcagcga | tcgaagcctt | 120 |
| tcttgcttga | tcatcacaag | caattgaaag | ccagatcatc | actattttag | ccgatgcata | 180 |
| tgatacgttc | gacctgagat | gcgagaagaa | cagtgcacga | attgtctgtt | gcatgcctgc | 240 |
| tctctatgag | tgggtgcact | accacgttga | tcgttacgaa | cgtaggcctg | tgacacatat | 300 |
| gtatggaatc | gcgctgcgcg | cggatgaggc | tctcctacaa | cctaagacac | ggtagcatga | 360 |
| gattacattg | catacgctca | cgggtcactc | aatcaataat | tcatccaatc | aataattcat | 420 |
| tcaactcaaa | t | | | | | 431 |
| <210> <211> <212> <213> <400> | 6617 131 DNA Glycine max | . | | | | |
| agcttgcatt | atctatactc | 201001222 | ctattataaa | tatastaaaa | ataaaaatat | 60 |
| | acceatageg | actyctaaaa | cccctgccgc | tgttatggtt | gcaagcgcgc | 60 |

| tggaaagact | g · | | | | | 131 |
|----------------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| <210> <211> <212> <213> | 6618 482 DNA Glycine ma | × | | | | |
| <223> <400> | unsure at 6618 | all n locat | ions | | | |
| tcttaagtca | cctgcangct | gcagctntat | agaactccnt | taaaaaatca | cttcggaatt | 60 |
| taagtttgat | tatgcacacc | atgctgataa | aattntattt | aaaacaagtt | catcagttta | 120 |
| tcttaaaaaa | attaatatac | aatgtaccgt | tgaaaataga | aacaattatc | aaaagtctat | 180 |
| tttttctaat | ttggtgggta | tggtaaacat | aacactcatg | attgaaaatt | agatagatga | 240 |
| aaacatcatt | ccatcatatt | aatggtgcag | gtatatcaaa | tgttacacca | attagaaagc | 300 |
| attatgaata | tgattagtaa | atgtgtgatt | atacatttaa | attattttt | aacatcacaa | 360 |
| gtgactgctt | cagaaatcag | aattgatgat | antttactag | aaaacaaaaa | ggaacttgag | 420 |
| acattattaa | taactatcca | gtgttattac | aaaagcatat | atgttattat | caatcaatta | 480 |
| сс | | | | | | 482 |
| <210> <211> <212> <213> | 6619 462 DNA Glycine max | × | | | | |
| <400> | 6619 | | | | | |
| gcaagctttc | tttctcaatc | aatttgtcta | ctgactaaca | attctaattg | caagttcaca | 60 |
| ttcttgttct | ttctttgtct | agcatgcata | tttgttcaaa | ctcatgaaaa | gaaacacaaa | 120 |
| ctccatcaaa | atcatgcact | caattcaaaa | tacagacata | cacccatttt | cataaaaaga | 180 |
| taaaagtgtt | tccctgccat | gtcataaaaa | aacaagtcaa | actgttcaaa | atgctttagg | 240 |
| atgagcaaac | taattaccca | taaataagat | agcagtatat | gtagacataa | agaaaatact | 300 |
| gtacgaaaac | caaaaattat | aataataaat | caagaagcaa | aaagtatcat | caagaatcaa | 360 |
| aattcctgtg | actagtcctg | tatatcctat | gtttgaccat | cctcctcatc | tgttagctga | 420 |
| agaactggag | taatgggagg | agaagtgtcc | acagcaagga | ct | | 462 |

| <210> <211> <212> <213> | 6620 448 DNA Glycine max | |
|----------------------------------|---|-----|
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| agcttgttct | gaactatagc tatcgaatgg ccaacatata ttgagatgct atgagcatgt | 60 |
| cgactacata | gagtagtata tagatgtggg aaccatcctc caccttacta tgataaacac | 120 |
| atgagtcaca | gggactttcg atgtcccatg agagacaatg aaatcattaa atctcttgta | 180 |
| ccactgcctt | agtgagtgct tcaacccata aagagatctc tttaatctac agacataatt 2 | 240 |
| ttcctttcct | ttcacttaaa aaccttcagg ttgtagcatt agaatgtctt cctctagtct | 300 |
| tccatggaga | gaggcagtta tgacatcgag ttgctctaac tccaagtcct tagttgccac | 360 |
| tagggccagc | agaacacgta tgaaggtgtg ttgactacca gatgtgcttt ataacatacg | 120 |
| tgctgtataa | aagatgactt cttcagtc | 148 |
| <210> <211> <212> <213> | 6621 151 DNA Glycine max | |
| <400> | 6621 | |
| gagctctcat | agctcaatta cgagtgtatc gatatgtgag gctccatgat cggacctgcg | 60 |
| aaagaaaagt | tatgaccatt agagtetete gagagetaae ttggtteaat teegtgegte 1 | 20 |
| gagagataag | acgcgcctgt ctcggtcctt c | .51 |
| <210> <211> <212> <213> | 6622 477 DNA Glycine max | |
| <223> <400> | unsure at all n locations 6622 | |
| caagcttgtc | gggggctcag caaatcttag tttcagagtc aatagattgt atatgcacat | 60 |
| | | 20 |
| | ggattttgap at satt as to satt as | 80 |
| | attactata attacta | 40 |
| | | |

| atgtctttct | tttcactttc | c cactctccag | aaccaacatg | ttcatgaaaa | aggacttggt | 300 |
|-------------------------------------|---|-------------------|------------|------------|------------|-----|
| tcatgtgcag | ccaagactgt | ctccagctct | ntaattatcc | aatattcaac | ttctttagct | 360 |
| agttctttct | aattatttto | ttccttcact | ttctgtttct | tcttttgatt | ntcttggctg | 420 |
| gtaattaagg | atgaagagca | gaagagaata | tatctcattt | acaagagcaa | acacata | 477 |
| <210> <211> <212> <213> <223> <400> | 6623 419 DNA Glycine ma unsure at 6623 | x all n locat | ions | | | |
| | | | | | | |
| agctngtatt | attcatcttt | ttcattccct | tctccctttg | ccaaaaagaa | ttcgccaagg | 60 |
| actaaccgcc | tgaattcttt | ttgtgtctct | cttctccctt | ttccaaaaga | acgaaggact | 120 |
| aaccggctga | attcttttgt | gtctcccttc | tcccttgtca | aagaattcag | aacgatacag | 180 |
| tctgagaatt | cttttgatta | ttcccattcc | cttatacaaa | agtgttcaaa | ggactaacca | 240 |
| cctgagaatt | cttttgtatc | cccattcacg | aagtatcaaa | ggtttaaacg | gctgagatct | 300 |
| ttgtcataac | acattggaag | ggacatcctt | tgtggtccaa | gaaagagaca | tctacttggt | 360 |
| ttgactgaga | acaaagaggg | acatctcttg | gtgatagatc | tagtggaggg | acatccact | 419 |
| <210> <211> <212> <213> <223> <400> | 6624 382 DNA Glycine ma: unsure at a | x all n locati | lons | | | |
| agctttggct | ctcaagaaga | gatcaaccaa | aggatggagt | attaaatatg | gatctcatat | 60 |
| gatccataat | tccaagtctg | atgtgggagg | agntatgaag | gtccatcatc | atgacatgcc | 120 |
| tgtcatgttc | ttggttcatt | atacagacat | acacccatga | tcctagagag | attagagtgt | 180 |
| ttccctgtca | tgtcataaac | aagcaaatca | ttctgtgcat | agagctctac | gatgaacaaa | 240 |
| ctaattaccc | attaataaca | tctcattcta | tgtagacatc | tagagaatac | ttgtcgaata | 300 |
| ccaacactta | taatcttaaa | tcacgacgct | atttgtatca | tcacgattca | aacttcctgc | 360 |
| gactagtccc | | | | | | 382 |
| | | | | | | |

| <210> <211> <212> <213> | 6625 468 DNA Glycine max | |
|----------------------------------|--|-----------|
| <223> <400> | unsure at all n locations 6625 | |
| agctntctta | a atatettate atagtgtgga tgtacatgte catatnttgt gaaagt | agca 60 |
| tgaatggaac | c gatgtgccta tcaaactaga gtgtcaaata tgccatttaa tgagtg | atga 120 |
| gtcacctctt | cctttcttcc ttgggatgtg cttattaatt aacactatgt ctaatg | tata 180 |
| ttatattgga | a ggcatatcaa atcatatgac atctcaagaa atgagaaaat ttaatc | ttat 240 |
| catgtgcaag | g attgaatggt attcgtcaaa ataatctctt ctcaattttt catatg | tgtg 300 |
| tgtgagtgta | a gaaagtatat caaataagag cttaatagga gctaatattt atcata | taga 360 |
| aaaagtgaag | g ttaagattag atntaagtaa accaatttta attatccatg taagaa | tgca 420 |
| tgactaacat | taactcctgt cacactagct agatatgctc cacatgta | 468 |
| <210> <211> <212> <213> <223> | 6626 109 DNA Glycine max unsure at all n locations | |
| <400> | 6626 | |
| tgcttgntca | tatcgagatg gtgagtggtc attctcattt gagtgtgatg gtgcaa | cata 60 |
| tttgtttgcc | ctagctggaa ctccagtgct tcacagctgt taatgatct | 109 |
| <210><211><212><213> | 6627 508 DNA Glycine max | |
| <223> <400> | unsure at all n locations 6627 | .• |
| gcccagcgtt | tggccttgag cgtganacgt gaactcaagc gacgagcatg agctta | tctg 60 |
| ccctactatt | ccctgtatgc cttgttctgt aatacacgat aggcctacag gacaag | ccaa. 120 |
| ggtctaatgg | attagecatg gtgaattttg aateetggaa tgteeeteet ttettg | aacc 180 |

| | | | | ` | | |
|-------------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| aactcgtacg | acatggcaca | ccacaatcca | atccacatat | tcgggaccga | tctaaataat | 240 |
| taaaaaaaac | aattatatat | tttcaccaga | ccaatagttt | attaactttt | atgaaacata | 300 |
| taatttcata | atagcaaaaa | ttttcacaaa | ttgttaattg | tcacaagaat | aagactagat | 360 |
| aacattaata | tcaatttggt | tctcttttaa | aaggttatct | tctataactt | ctcatatgct | 420 |
| ttctttttt | aacaaaagct | atttcttaca | agactattta | attttttat | ggaaacanga | 480 |
| agacctaatt | atttaataca | tgtaagct | | | | 508 |
| <210> <211> <212> <213> <400> | 6628 422 DNA Glycine max | c | | | | |
| gcctccaaca | ttgggatcgc | agggcattct | gactacctag | aggctacgtg | tatccacata | 60 |
| agacgtttaa | taatgactat | gcgaagtcga | aatacaagaa | taagacataa | caaacagtaa | 120 |
| cggataccag | ctaatggatg | aagcctgagt | aatacaattg | taccaacacc | caacgaggat | 180 |
| gatcggcggc | ttatcgattc | acatggatcg | acgtggaggg | acaagttgag | ggagggttct | 240 |
| atttaagggt | ggcgtaaaga | actgaataga | attatgatga | tgcaaagtgt | catttttaga | 300 |
| aatcgacggt | gacggcgatt | tcgatgagga | ctcactaaag | tgacttaaac | aaggcaactg | 360 |
| ggccccctat | tatgattacg | gatagatgct | gtctgggccc | ccgaattttc | atgggcaccc | 420 |
| CC | | • | | | | 422 |
| <210> <211> <212> <213> | 6629 460 DNA Glycine max | : | | | | |
| <223> <400> | unsure at a 6629 | ll n locati | .ons | | | |
| agcttcatgg | tgaatcaaag | gtgattcaaț | ggtgttttga | tgataacaat | gatgataaca | 60 |
| aaagatgatg | acaaaggtga | cgacaaaaag | ctcaaagatc | aatcaaagaa | caactcaagt | 120 |
| gaatcaagaa | caattcaaga | gttcaagata | agaatcaaga | agaattcaag | actcaagaag | 180 |
| aaagtttaga | ttcaagaatc | aagattcaag | gttcaagatc | tcaagaatca | agatcaagat | 240 |

tcaagactca agattcaaga atcaagagaa ggcttaacca agataagtat gaaaagtttt 300

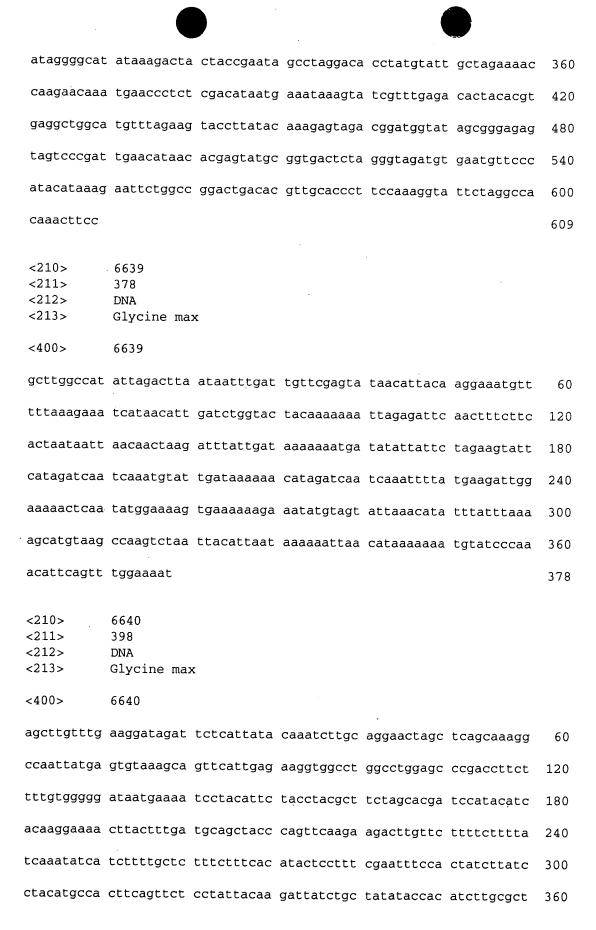
| tctcanaaat | : tgagtagcad | atgattnttc | tcanaacatg | tttaccaaag | g agttnttact | 360 |
|----------------------------------|-----------------------------------|--------------|------------|------------|--------------|-----|
| ctcaggtaat | cgattaccag | g attggtggta | ntcgatacca | atagcaaaaa | ı tgggtttgaa | 420 |
| aagttntcaa | aatggaatta | ı caacgttcca | attaatttca | | | 460 |
| <210> <211> <212> <213> | 6630 491 DNA Glycine ma | ıx | | | | |
| <223> <400> | unsure at 6630 | all n locat | ions | | | |
| atcttaagca | cctgagctgc | agctatgctg | aaacattaca | atagacctct | tcaacctcaa | 60 |
| cagcaaaata | agccacaaca | gaacaagtat | gacctctcca | gcaacaggta | taatcccggg | 120 |
| tggaggaatc | atcccaacct | tagatggtcg | agtccttcac | aacaacaaca | acaacaatag | 180 |
| ccttattttc | ataatgctgc | tggcccaagc | agaccatacg | ttcctccacc | agtccagcag | 240 |
| caacaacaac | aacagcagca | acagcaacag | tcccaaaaac | aacaaacagt | tgaggctcct | 300 |
| ccacaacctt | cccttgaaga | acttgtgagg | caaatgacta | tgcaaaacat | gcagtttcaa | 360 |
| caagagacca | gagcctacat | tcagagctta | actaatcaaa | tgggacaatt | ggctacacag | 420 |
| ctaaatcaac | aacaatccca | gaattctgac | agattacctt | ctcaatctgt | ccagaatccc | 480 |
| aaanatatga | g | | | | | 491 |
| <210> <211> <212> <213> | 6631 361 DNA Glycine ma. | x | | | | |
| agcttctggt | gggacatctt | gacttgcttt | ccaatctgac | attcaccaca | gattctgcct | 60 |
| tcttctattt | tcagattggg | aatgcctcta | acagcacctt | tgtcaatgat | attetteatg | 120 |
| cctcttaagt | gcagatgtcc | aaatctttga | tgccatáttt | tgacttcatc | ttctttggag | 180 |
| gatggacatg | tggaggagta | actggtttct | tgaggtgtcc | ataggtagca | gttgtccttt | 240 |
| gatctgttgc | ccttcattag | aacttcattc | ttctcatttg | tcaccaagca | ttctgacttt | 300 |
| gtgaagtcta | cattgaatcc | ttcatcacac | aactgactga | tgctgatcaa | gtttgctgtc | 360 |

| a | | | | | | 361 |
|-------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| <210> <211> <212> <213> | 6632 442 DNA Glycine ma | x | | | | |
| <223> <400> | unsure at 6632 | all n locat | ions | | | |
| tgcggcatgc | aagcttgtga | attctatctt | tccttttatt | ttgtagtgtt | ntaaatttaa | 60 |
| tcattacgtg | tatcatctaa | tagtgtactg | atatattatt | taatatatta | aatttataaa | 120 |
| aaaatatttt | aatttttat | attttaaaaa | ttttcatttt | gatatattac | gtttttaaat | 180 |
| ttttatttta | gtattttat | attctaaaaa | atttcatttt | aatcttcttt | tttcatctgt | 240 |
| taaaaaaacc | ggtgcggcat | taatatttaa | aattgtgaaa | tatttaatta | ttttaaccac | 300 |
| tatttttta | aattgattat | tttacttata | tttaatcctc | cattgaaaat | gtctacaatt | 360 |
| cagctgaact | gtttatgtta | aatataatgt | aactgaactg | caacatgatt | aaatagacaa | 420 |
| ctattacata | taaatcttca | aa | | | | 442 |
| <210> <211> <212> <213> | 6633 469 DNA Glycine max | ĸ | | | | |
| <400> | 6633 | | | | | |
| agcttggacg | aataaggtga | tgcatctagg | aaacacaaca | actaacaagt | atgaaaattg | 60 |
| taaatatata | ttggttttag | ggtttacaca | cgaatggata | aaaataattg | tttgtgtttt | 120 |
| acaaatgcag | ggttaagttt | gcacattggg | ccttaaagag | actactaccg | aatagccttg | 180 |
| gagacctatg | tagtgtttga | gaagccatga | acaatatgat | cactctacaa | catattgaaa | 240 |
| ttaaggcatc | gtttgagaca | actacacatg | tggttgggca | tgtttttaaa | gttaccttat | 300 |
| acaagaaact | atttggcatg | gtatcaaggt | atgtgttaaa | ccagattgtt | gctgagtttg | 360 |
| agcatgtaaa | ttatgctagc | attgatagtt | ctcattatag | atatataatg | agaactactc | 420 |
| acggtctctc | atgtgcacgt | gagctagcta | gatatgttct | tggaacata | | 469 |
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| <212> <213> | DNA Glycine max | | | | | |
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| agctttgagc | aaattcaaac | gacaataacg | tttactcgga | tgttcgattg | tgtcccgtag | 60 |
| aatatcgcga | cgctcaaaat | tgaaaataga | agctctgagc | aacttcaaac | gacaataaat | 120 |
| ttttactcgg | atctccgatt | gtgtcccata | atatatcgag | acgctcgaaa | ttgaaaacag | 180 |
| aagctctgag | catattggaa | cgaccttaac | ttttttctcg | gatgtacgat | tgtgtccctt | 240 |
| agtatatcaa | gacgctcgca | tttgacttcg | gaagctctta | gcatactcaa | acgacaatat | 300 |
| tctttacctc | ggatgtccga | tagagtcctg | caatatatta | aga | | 343 |
| <210> <211> <212> <213> | 6635 450 DNA Glycine max | | | | | |
| <223> <400> | unsure at a 6635 | ll n locati | lons | | | |
| agcttatcca | aacacaataa | attctacacc | aactcatgtc | cagtctattt | agataaacgt | 60 |
| taggttttca | acaattgtgt | caagtttttc | ctttcatgtg | aatcacgtca | gtcttaaatg | 120 |
| caataaaagt | acatttcact | tttgtcaaaa | agcatatatc | atgtcaatgt | aaatttattt | 180 |
| taatttcatt | ttcataaatc | tagatataaa | caattttatc | aatatttcct | gttttagcac | 240 |
| taactgtatt | aaaacacata | taaaataaat | ttatcataat | aacatttatt | ctccaaactt | 300 |
| tagtaataaa | cacagtagcc | aaacaattaa | aaaaaatacc | aataagtata | tttccaatga | 360 |
| tattntttt | aattcgctaa | ggttgtgttc | gtttaagaaa | aaaagactaa | aaaatgaana | 420 |
| ataaactata | aaataatatg | agatctatac | | | | 450 |
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| <223> <400> | unsure at a 6636 | ll n locati | ions | | | |
| agctattatg | aagttadaga | aatctttgta | agctttntac | ttcttgttat | atgtataacc | 60 |
| caatctagcc | ttttcgatag | cacatttttg | ttgtgtaagt | aaagcttcca | aattatctct | 120 |

, . . .

| ccccatagtg | aacttggata | aagtttttag | caagtattct | accttgactt | ctaaaacttt | 180 |
|----------------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| acatccttca | caaggagaag | tgacattagt | ggtgttagtg | caattgcaag | aagacttgtt | 240 |
| cttttcttt | tctaaaatat | cattttttgc | tctttctttc | aaaaattctt | tttgaatttc | 300 |
| cactagetta | tccacatgcc | acttcagttt | tccttttaga | agattatttg | caatagacaa | 360 |
| attntgtgct | tcttcatgta | tttcattgaa | agcatgtagt | agctaatcat | agttatcatc | 420 |
| aacttccaaa | tctaaaatgt | ttacctcact | ctcaacttca | | | 460 |
| <210> <211> <212> <213> | 6637 363 DNA Glycine max | c | | | | |
| ccaatgcgag | ctctgaccgc | tgttcgttct | tcccgcgatg | ctccttatca | tattcaccta | 60 |
| | tagcctagac | | | | | 120 |
| | ttgattttgc | | | | | 180 |
| | agtatcgtcg | | | | | 240 |
| | accactttag | | | | | 300 |
| | tgggagctac | | | | | 360 |
| caa | | - | | | J | 363 |
| | | | | | | |
| <210> <211> <212> <213> | 6638 609 DNA Glycine max | | | | | |
| <223> <400> | unsure at a 6638 | ll n locati | ons | | | |
| gttcctgcgc | tatctcccnt | actacgtcng | nntctcgcnt | nctntttgcc | gtanacaatg | 60 |
| tcactcnnnn | nntnnntnnn | nnntaggnnn | nnnngntgnn | nattgaatct | ttgagcccct | 120 |
| cgnatcnccg | agagaccacc | agagnggacc | cgaacgcatg | caagctaaag | agacgcatat | 180 |
| acganacact | tccttcttca | ggtctgaaaa | taggaaagac | accgtaggtc | taacggttta | 240 |
| cacacacaca | tggattgaaa | ataatgattg | ggtttcacac | aagcatgacc | aaggtagggc | 300 |



| tcatcatgtt | tctcattgca agcacgtag | t agctaatc | | | 398 |
|--|---|---|--|---|-------------------|
| <210> <211> <212> <213> | 6641 349 DNA Glycine max | | | | |
| <223> <400> | unsure at all n loca | tions | | | |
| agcttacatc | aaggaattga tggtactct | n tgatgatata | tcatctcacc | atattcctag | 60 |
| agaggaaaac | caagtggttt atgctcttg | c cactctgtca | tcgatgttca | aaataggccc | 120 |
| tcacatagac | ttttcgtgca tagacatca | a atgccatatt | aagcctgtac | actgttgttt | 180 |
| gatagaagaa | gatgaggatg gtaaccctt | g gtatttcgat | atcaaaacat | acatcaagga | 240 |
| caaggaatac | tcgtccgagg cctctgaca | a tgacaagagg | acattacaga | ggttggcagc | 300 |
| cagtttcctc | ctgagtggcg atgccctat | a taaaagacac | catgatatg | | 349 |
| <210> <211> <212> <213> | 6642 298 DNA | | | | |
| \Z1J > | Glycine max | | | | |
| <223> <400> | unsure at all n loca | cions | | | |
| <223> <400> | unsure at all n loca | | attattatca | gctcatttaa | 60 |
| <223> <400> agctagannt | unsure at all n loca 6642 | a atttcacttt | | | 60 120 |
| <223> <400> . agctagannt aggaactttc | unsure at all n loca 6642 tgtgagttga tttagcctt | a atttcacttt | ttattttatt | attatattat | |
| <223> <400> | unsure at all n loca 6642 tgtgagttga tttagcctt aaagtaaaat gtccgattg | a atttcacttt g ggttttttta t tatttttgct | ttattttatt | attatattat | 120 |
| <223> <400> | unsure at all n loca 6642 tgtgagttga tttagcctt aaagtaaaat gtccgattg tattttgatt attttatta | a atttcacttt g ggttttttta tatttttgct taaggcggat | ttattttatt ttttttattt taaacgagat | attatattat aaccgaggtt tacgacacat | 120 180 |
| <223> <400> | unsure at all n loca 6642 tgtgagttga tttagcctt aaagtaaaat gtccgattg tattttgatt attttatta tgatcagttg gattntatt | a atttcacttt g ggttttttta tatttttgct taaggcggat | ttattttatt ttttttattt taaacgagat | attatattat aaccgaggtt tacgacacat | 120 180 240 |
| <223> <400> agctagannt aggaactttc tattttcaga acgacatgaa acgatcgatt <210> <211> <212> <213> <223> | unsure at all n loca 6642 tgtgagttga tttagcctt aaagtaaaat gtccgattg tattttgatt attttatta tgatcagttg gattntatt gatattcctt taaacatcg 6643 375 DNA | a atttcacttt g ggtttttta tatttttgct taaggcggat ttaagtgaaa | ttattttatt ttttttattt taaacgagat | attatattat aaccgaggtt tacgacacat | 120 180 240 |
| <223> <400> agctagannt aggaactttc tatttcaga acgacatgaa acgatcgatt <210> <211> <212> <213> <223> <400> | unsure at all n loca 6642 tgtgagttga tttagcctt aaagtaaaat gtccgattg tattttgatt attttatta tgatcagttg gattntatt gatattcctt taaacatcga 6643 375 DNA Glycine max unsure at all n locae | a atttcacttt g ggtttttta tattttgct taaggcggat ttaagtgaaa | ttattttatt tttttattt taaacgagat ttactgctta | attatattat aaccgaggtt tacgacacat tacgatct | 120 180 240 |

| cgagtggagg | g aacgccccgg | catttacgca | acaagcataa | tgtaaacctt | tacggtttta | 180 |
|-------------------------|--|------------|------------|------------|------------|-----|
| aaagctctat | agttgggcct | aggctttaga | gttttcattt | tgttaaggct | ttgtgtcttt | 240 |
| tgtttttgaa | tttataaata | caaggatctt | tcttcatctg | ttcctgggct | ctacccattc | 300 |
| tcattcattt | gcatgtttac | ttctttntct | aaaacgacag | attcgatgac | gagtcctccg | 360 |
| aaggcactaa | ı tacct | | | | | 375 |
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| agcttatgca | ggcagagttc | gagatgagta | tgattggaac | attgatgcct | tacttggact | 60 |
| ttaaatcaag | caaagcagat | gaaggaatat | acatacatca | aaccacgtat | gtgatggaac | 120 |
| tgctcatgaa | gttcgagatg | gacaatacaa | tgtcaatgaa | gacctctact | catccaacca | 180 |
| ttgtgcttgg | attggacaat | gtgtctaagc | aggtgagtga | aactgcatat | ccaggaatga | 240 |
| taagatctct | tcgatatcta | tctacttcca | gaactaacat | tatgctcatc | gtatgagagg | 300 |
| caacctaact | gctccatggc | atttgataga | agactccaag | acgattatgc | catagatgca | 360 |
| tgag | | | | | | 364 |
| <210> <211> <212> <213> | 6645 476 DNA Glycine max unsure at a | | .ons | | | |
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| agcttggctt | taaaaagttc | accttaagat | ccgtaacaac | ttcaaagcac | ctcataattg | 60 |
| cctttaatgt | gaggacgttc | attaaagttg | gttttcctag | gaagagggta | tcatccgcaa | 120 |
| attgaaggat | agataaagaa | aagtcccctt | ctcctaaggg | aataccttca | aaaaagatat | 180 |
| tgtttcaccg | cttctcacat | caagtcacca | agaccctctg | ccaccatgat | gaaaaagaag | 240 |
| agggctatgg | aatccccttg | gtagagacct | cttttaccct | taaattcttc | cgtaggactt | 300 |
| ccatttatca | aaatagactt | ataagtgaat | ttcacgcaac | atctaaccca | cttaatccat | 360 |

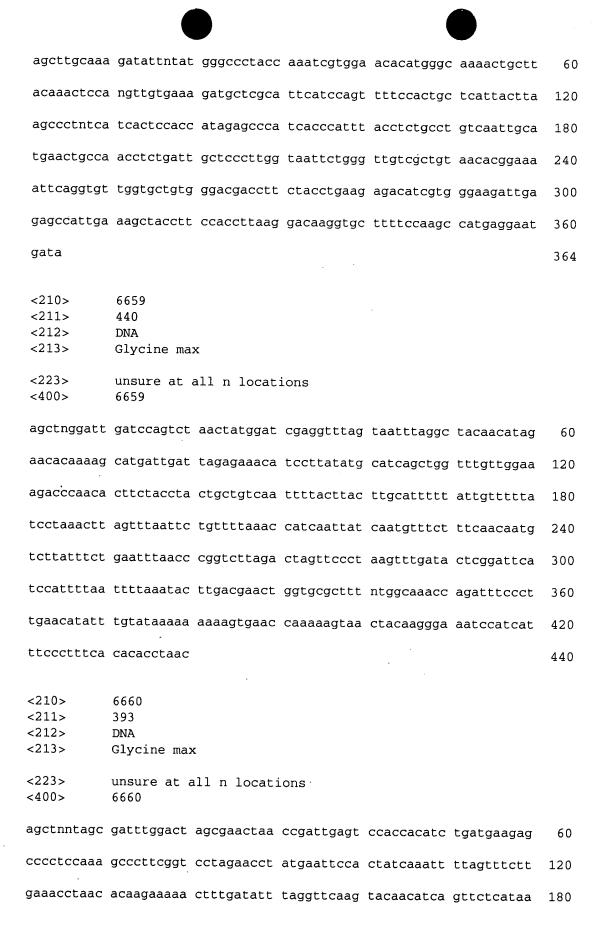
| attncactaa | agtttattct | attcataata | tagttaaaaa | aacgtcacct | agtgggcgct | 420 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| tctcacctaa | tccactctca | ataagatgtc | ctgactattt | tcatacactc | tatcaa | 476 |
| <210> <211> <212> <213> | 6646 302 DNA Glycine max | × | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| taataacact | ggagtcgaga | ggaactcatt | taacttgtct | gcctctatcc | tgaccaaatg | 60 |
| gcctcttatt | ctagcacatt | taggagcttg | atttgcagga | ctatagaaat | tggcatagac | 120 |
| atctntaacc | actggcacat | cgatgctaat | ttcctgaaag | tggcaacgca | tttgagaaca | 180 |
| cttcgcctct | acaattctac | tttaaactca | tcaaactcag | aatcgataag | tttcacattc | 240 |
| ctttccggaa | ggatccttcg | gtctagaata | ttatcgatat | atcggctcca | ggctttctct | 300 |
| ga | | | • | | | 302 |
| <210> <211> <212> <213> | 6647 257 DNA Glycine max | c | | | | |
| <400> | 6647 | | | | | |
| agcttcctcg | aatagtcaat | gcaggtcctc | tagatgtgga | tagtgttgga | gtcgtcattg | 60 |
| gagaagtcaa | ggcaaaagag | gtagatctag | gtggagtgga | tttcagattt | ggagaaagaa | 120 |
| acatcaccac | cgttggcaag | gcaaactcca | cctttgccgc | gagatacgac | gttggcgagg | 180 |
| cataggtgaa | cggagtcttt | agtcgcaacg | acgcctttaa | caatgagaag | aagttgttgt | 240 |
| cactatcgtt | ggacaag | | | | | 257 |
| <210> <211> | 6648 | | | | | |
| <212> <213> | 333 DNA Glycine max | : | | • | • | |
| | DNA | | | | | |
| <213> <400> | DNA Glycine max | | cctagtctcc | aagagcaaga | gagaagatgg | 60 |

| tgccttatgc | agtgggtctt | aatctagctt | aaattaaggc | ccaattaggt | taggtgtcct | 180 |
|-------------------------------------|--|-------------------|------------|------------|------------|-----|
| tatcaaaatg | ctaatacctt | caatcaaaag | gtttttcccg | ctcgaatcta | tgctcttgca | 240 |
| atgctttatg | ggtagagtta | tgggctcttc | acaaaggtat | caagctagta | aggaacttgc | 300 |
| atctcaccta | tgcattttta | tttagagatg | gac | | | 333 |
| <210> <211> <212> <213> <223> <400> | 6649 432 DNA Glycine ma unsure at 6649 | x all n locat: | ions | · | | |
| agcttatgcg | catatttcct | tacgaacgtt | cacttgcaca | agacattcta | ttaactaaga | 60 |
| aaaatgcacc | catatacaat | caaggcagct | tcgttaccta | gattatttac | atgtacttcc | 120 |
| aaggtgtatt | tgttacttac | atcacacaca | tttcttttgc | taaattcaca | tacatgcata | 180 |
| ctctaagcac | tntggctatc | gaaaattgca | tacgtgcaca | tcctggtatt | tctaatacct | 240 |
| atacatacac | aaactttatg | ataaaccttg | actatctaca | caataaggtg | ttacatttca | 300 |
| tgcttctttt | tttcaagttt | tttttttact | acctanagcc | gcatgcaaac | tcaagtatat | 360 |
| nttcttttgc | tcactaaaat | tgtattaaaa | aaaaaggtat | cnttgtaatg | gtattcatgc | 420 |
| aacatattta | ta | | | | | 432 |
| <210> <211> <212> <213> | 6650 395 DNA Glycine max | ς | | | | |
| <223> <400> | unsure at a | all n locati | ons | | | - |
| agcttagtgc | acagtgactt | tttgataaac | ataacactgc | agcatttgga | ggatataaaa | 60 |
| cgaggcacta | tgcnttttgg | aggaggttgg | tgaaaggcat | gctctgaagc | aaaaacatcc | 120 |
| actttgggag | cttttcttct | gtcattatct | ttcatttcct | ctgtttcatc | ttttgtttt | 180 |
| gagctnttca | tgactatgag | agactaaatt | acccattgtt | gggggctcgg | ataccaaaca | 240 |
| ctctttgatg | taatgatttt | tactatccat | ctaatgttat | gtcaatatca | ctgctccctt | 300 |
| tctaagaata | tttccttggt | tatgcgttga | taactcatct | acatgtatgt | tataggcgtc | 360 |

| taatcattgg | aaaatgcttt | taacctaaaa | acttg | | | 395 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| <210> <211> <212> <213> | 6651 459 DNA Glycine max | ς | | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| agctntaaat | atataatctg | gctttatgtt | aaaatttcat | atttttcatc | taatacatta | 60 |
| aaatatgcaa | tatttgagaa | caaaaaaaat | gcaatatttt | agtttatttt | aacatagaca | 120 |
| ggttagttaa | tagtttttct | atatatatat | atatcacaag | acatgatgat | aaatagttaa | 180 |
| cttctttaag | ttattgtcat | agtttaattt | aattttttt | ggacgtaggc | acgtagccat | 240 |
| agcttaattt | tttttttta | cgcagtcata | gtttaatttc | tgagcatgtg | aatgaagaga | 300 |
| atcttcttaa | cagaaataaa | atccacttaa | gtaatctcat | tatctcgaaa | agaaattgtg | 360 |
| atgagatatc | tttagtgaaa | aaagttctac | atactntaaa | atgtttntgg | taaactagtt | 420 |
| aagaaaccaa | tagtgaatta | gcatacacga | attaaaaaa | · | | 459 |
| <210> <211> <212> <213> | 6652 350 DNA Glycine max | | | | | |
| <223> <400> | unsure at a 6652 ° | ll n locati | ons | | | |
| agctagtata | atggctatac | atgatacatg | tcatggcttg | gttnggatca | agggtaaaag | 60 |
| ggatgcccca | cattattttc | atgacacaaa | tgcagaaatg | atgatttgga | aactctatgc | 120 |
| aaaactggtc | atgcatgcat | ctatgcggac | actcacatgt | caaaatttta | tggtcatgtg | 180 |
| atgctagggc | tcacgattca | tttcctctat | atataaataa | cccaatgttg | ccaaaatatg | 240 |
| ttcttttatc | aatgtgtgca | ttcatccgag | tccatttcgg | gcgtccggga | aatttacagc | 300 |
| attcactctt | atgcgtagac a | acattttcca | taaattggtt | atgatcaatg | | 350 |
| <211> <212> | 6653 207 DNA Glycine max | | | | | |

| <223> <400> | unsure at all n locations 6653 | |
|-------------------------|--|-----|
| agctntgatc | c taattcaaac gacaataact ctttactcgg atgtctgata gagtcccgta | 60 |
| tatatctaga | a cgatcggaca tgcattctga agctctgagc taatatcaac gacaataacg | 120 |
| tttagctctg | g atgctctgat cgagacctgg tatctaatga gacgctccca attgaattat | 180 |
| gaagctcata | gcttattcaa acgacaa | 207 |
| <210> <211> <212> <213> | 6654 357 DNA Glycine max | |
| <223> <400> | unsure at all n locations 6654 | |
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| ggtgattttc | caccatggag atgcagcgga agacaaagga gaagaggtaa gaggcggcac | 120 |
| catccactag | ggaataagcc atggaagaag gagcttcacc accaagatga gccttggata | 180 |
| agaagcttgg | agaggatgct tcaatggagg aaaagaaaga gggagagaaa gagagagggg | 240 |
| gggagcatga | aattgaagga agaaaaatgg gagagaatgt gaactctgag ttgtgtctca | 300 |
| caagactctc | attcatcaaa gttacaacag gtgttacaca tgcttctatt tattgac | 357 |
| <210> <211> <212> <213> | 6655 274 DNA Glycine max | |
| <400> | 6655 | |
| agcttggatg | atgactgcga tgatgaaaag gcatgtccca tgactcccat ccacatgggg | 60 |
| gctgctaaca | gcaataacag cattgaagag gttgaatctg atgacaatgt ctaagcaatg | 120 |
| gaatctgatg | acactgttca agcaatggag tttgatgaca aagtccaagc aatggaatcc | 180 |
| gatgacaatg | tccaagcagc agaatctgat gacaatggcc atgctgtgga atatgatcaa | 240 |
| ggaaactggc | aattacgttt taatggtgcc ccca | 274 |
| | | |
| <210> <211> | 6656 471 | |

| <212> <213> | DNA Glycine max | |
|-------------------------|--|-----|
| <223> <400> | unsure at all n locations 6656 | |
| agctngcatg | g aattcacatt ctcccctttc tcaagcaaat tcttcttgac atgatcaaga | 60 |
| tcttcatgat | ttacattete eccegttttg atgatgaeaa ecaeetgtag gttaggagea | 120 |
| aaaacaaaga | a aaaatatetg aaattetgat accaatgeea gatgtegtae aggatgteae 1 | 180 |
| gacatcacgo | ttcagaacat gcagattata tttgagagta tgaacagatt aaacaggtaa 2 | 240 |
| ataacacaag | gagaattgtta acccagttcg gtgcaatgtc acctacatct ggggggctacc 3 | 300 |
| aagccaggga | ggaaatccac taaaatagtg ttagttcgaa gatctaacag ccactgttta 3 | 360 |
| caaccttctc | acctaaccac tacccgtgca atctctacct aagagccact cttagatatg | 120 |
| agaacccctc | tcactccctc tcaatcactc ttccgtgttt acaaataaat c | 171 |
| <210> <211> <212> <213> | 6657 417 DNA Glycine max unsure at all n locations | |
| <400> | 6657 | |
| agctntacag | cccagacacc tcaacaggtg agacccgacg aggctactcc tcttgagccc | 60 |
| acacctgcac | aggtcgaacc agtgccaact aatccaccat ctccagtggc ggatccatct 1 | .20 |
| tcttccaagc | ttgaagcagc tccctcatct tcacctatta ttattatctc tgaagactct 1 | .80 |
| atagagtcag | catctggatg agctactact cettetgeta eccetgttt ceatctaaca 2 | 40 |
| gatgaggagg | atacacagga ccagtcacag gaattctaaa ttcttgattt ttcctttctg 3 | 00 |
| gaaattatta | taactactat ggtttagtac atttttttt gtgattttgg tttataatta 3 | 60 |
| taattatata | cttgcgtttt tcttgcgaat acttagagtg catgctttga agcatac 4 | 17 |
| <210> <211> <212> <213> | 6658 364 DNA Glycine max | , |
| <223> <400> | unsure at all n locations 6658 | |



| aactgatgtt | . aacgcacgac | actcaacatt | dattctacat | | ttgagtacaa | 240 |
|-------------------------------------|--|-------------------|------------|------------|------------|-----|
| | | | | | | 240 |
| tactttacat | cagttctttt | aaaattgatt | ttaacaactt | ccagttattt | taaaaaatac | 300 |
| cactgtgtat | ttgttaacat | caattntcat | attaaccgat | gttaactgag | cgatataata | 360 |
| tacatattt | ttagtagtgc | aaacacaatt | taa | | | 393 |
| <210> <211> <212> <213> | 6661 382 DNA Glycine ma | x all n locat | ions | | | · |
| <400> | 6661 | | | | | |
| agcttccatc | aagtggtaat | cagagcacaa | gagtttcaag | taggtgctcc | ttanacctcc | 60 |
| attaattntt | tttctttgcc | ttctcttcca | ttgttgtttc | ttaatttttc | tccatgtatc | 120 |
| tcctcacatg | tcttgttcta | aattttgtta | acatgattct | ttagagtttc | caccgattaa | 180 |
| acttgctata | gaagttágat | ttgattttct | atggctcaaa | tttcttgttc | ttgttcttga | 240 |
| accatgaatt | gtgctgagtt | taggttcctt | tgagttttgt | cttgctattt | tctgaggctg | 300 |
| acacctaacc | catataattc | ttacttacat | atgtaatctg | acgaatacct | cataactcta | 360 |
| gcgtgacctg | ttcacctact | tg | · | | | 382 |
| <210> <211> <212> <213> <223> <400> | 6662 401 DNA Glycine mas unsure at a | x all n locati | ions | | | • |
| agctnnttac | aaaaggttca | tcaagtcata | gtgaaatatg | gaagtaacca | tcctgcaaaa | 60 |
| ttggggcaaa | agatgaatcg | agtcacatca | ctgcttcgtc | tactgccaaa | catatttagg | 120 |
| attggtgatg | tccttgttac | ttccagtttc | accttgacaa | agatgtcatg | gaccatgttg | 180 |
| aaaatctaaa | ttgattcaac | cccatatcct | gcgtaaaaat | tcgcaatact | tcgactgtac | 240 |
| atcattcgca | tgcatccatg | cttttcattg | gatgcattgc | tcgttgcatt | ctttccttga | 300 |
| aaaataaaat | aaaatgaact | taatcattgt | tataaaaaaa | gaaagggaca | cgctttacga | 360 |
| cgcccttacc | gaactcgtgc | tatagctaga | gtaatgggtg | a | | 401 |

| <210> <211> <212> <213> | 6663 312 DNA Glycine ma | x | | | | |
|----------------------------------|-----------------------------------|-------------|-------------|-----------------|------------|-----|
| <223> <400> | unsure at 6663 | all n locat | ions | | | |
| agctnnnttg | aaagacacat | ctcttcaaac | cattttgaan | aggtacaatg | gacatatata | 60 |
| catgtgtgtc | tgaatttgaa | aagtaagaga | gagattntaa | aaagagaact | ttattatcaa | 120 |
| atgttctcta | aacaactatt | ggccaaacac | tcgcaaatca | attgaatatt | cttctaagat | 180 |
| tntcaacttg | tattatcatc | tctaaaagag | agaaattctt | ctgtatattc | taaacattgg | 240 |
| tgtgatcaag | agaatgtttg | tctcttgact | tgtgagaatc | ttgaacacaa | gggagacgga | 300 |
| tcccacgatg | tg | | | | | 312 |
| <210> <211> <212> <213> <400> | 6664 327 DNA Glycine max | x | | | | |
| | | ataggggagt | annt aat aa | at as t as t as | | |
| | atggtgaatc ggtgacatag | | • | | | 60 |
| | | | | | | 120 |
| | agacaattca | | | | | 180 |
| | acattcctga | | | | | 240 |
| | tcttgattca | | gaacgcttaa | ccaagataag | tatgacaagt | 300 |
| ttttctcaaa | tattgagtag | cacatga | | | | 327 |
| | 6665 326 DNA Glycine max | ζ | | | | |
| <400> | 6665 | | | | | |
| agcttgtcac | acccaatgtc | cacccttaat | gagttctata | ggcttatatg | ccacgtctcc | 60 |
| agtgcgtgcc | actccacgag | tgacacgtat | gcaagagcac | gacactacgt | ctccagtacg | 120 |
| tgccacttca | tgagtgacac | gtatgcaaga | gcacaccaca | acgtctctag | tgtgtttcac | 180 |

| tccatgaagt | gacatgtatg caagagcatg ccacatctgt agtacatgcc actccacgag | 240 |
|----------------------|---|-----|
| tgacacgtat | gcaagagcac accacaacat ctttagtatg tgccactcca tgaagtgaca | 300 |
| catatgccag | g agcttaccac catgtc | 326 |
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| <211> | 127 | |
| <212> | DNA | |
| <213> | Glycine max | |
| | | |
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| aacatcaaag | tgaaacgaca ttcaaacagc acaagctatc acagccaagc aaaacagagc | 60 |
| aaaggcagag | aactctgcca aaacaccaac caaatcacaa gctttctcac ttaaagactc | 120 |
| caataac | · | 127 |
| <210> | 6667 | |
| <211> | 445 | |
| <212> | DNA | |
| <213> | Glycine max | |
| (213) | Glycine max | |
| <223> | unsure at all n locations | |
| <400> | 6667 | |
| agcttcttat | ctaaggcact cttttggtgg tgaatcttct tcttccatgg cttattctct | 60 |
| agtggatggt | gcctcctctc acctcttctc ctttatcttt cgctataact ccatggctga | 120 |
| | | |
| aaatcaccat | tgaaggacct tattgaagct caaagatcaa gcctccatag aagcttctca | 180 |
| 20022000++- | | |
| accaagette | catcactcat gattgtcatg tatgaatgca aaaactatnt actgtagcaa | 240 |
| ttcgtggtat | ctttcctgac aaagttaggg ttgccataac tcgtctatgc tttctttnta | 200 |
| - cogoggeac | | 300 |
| atgctatcta | tagcaaagtc attgacccta gaaaattgga tgaattggag aatgtggctt | 260 |
| | | |
| | ougeddaged deegdeecta gaaaattyga tgaattggag aatgtggett | 360 |
| ccattgtcct | ttatcaaatg gagatgtatt ntcctccatc attntttgac ataatggttc | 420 |
| | | |
| acttaattgt | ttatcaaatg gagatgtatt ntcctccatc attntttgac ataatggttc tcatctggcg aggga | 420 |
| acttaattgt | ttatcaaatg gagatgtatt ntcctccatc attntttgac ataatggttc tcatctggcg aggga 6668 | 420 |
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| <210><211><212><213> | ttatcaaatg gagatgtatt ntcctccatc attntttgac ataatggttc tcatctggcg aggga 6668 533 DNA Glycine max | 420 |
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| ngccgccagg | anaatgatac | ctgatgacgc | tagcgacaga | ctgncatgac | tcagcggtgc | 60 |
|----------------------------------|--|------------|------------|------------|------------|-----|
| actgtatagc | agatagtgta | caatccgtct | tcacagatgg | tactctttca | caatttactt | 120 |
| cagaagaaca | tggtgctgaa | gaatatttcc | ctgcccgatg | tcaatgatca | aggcgagtag | 180 |
| gcccaccact | atgagatacc | catctgtgga | gcattggcat | gacaatgcct | acctctggtg | 240 |
| gctaacacca | tcctatagtt | gtatttgtag | tgggagacat | aggcttaaca | tacgtgtgat | 300 |
| taccatatta | ttctaatgaa | aggaaatagg | cgaaactagc | tgttcgcgaa | ttcaccgatt | 360 |
| gtgctagtgt | ttggagggat | caacttatga | cttgacggct | caagactgat | gataggccta | 420 |
| ttcgttgatg | agaggagatg | catattgctt | acgatggaga | tttgacctag | acactatcat | 480 |
| ctggatctca | cataacctgc | cactctactc | aagattctga | ggtgaggaca | ctc | 533 |
| <210> <211> <212> <213> | 6669 443 DNA Glycine max | c | | | | |
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| agcttacggt | ccatgacctc | atacattcgc | tcttattggg | tatatcccac | tagttttctt | 60 |
| cttaaaagct | tgctaatttt | atgccatgca | gataggctat | atggaagtat | ccacatacaa | 120 |
| cagagggaag | ttgaaagggc | gtagaaacta | aacatatttc | aagcgtttca | ctttaacgca | 180 |
| caattgtcta | atgaacagag | ttgcactcat | ctacaatttc | aagctgacgt | acagcataag | 240 |
| tatccatttc | cctcgacatt | aactcaaatt | ttgtgtacag | aacataaaaa | tatttgttac | 300 |
| taaatactga | ttctgactag | gacaggatag | ccatgacatc | tgaggccctc | aaggcaatgt | 360 |
| agacagaacc | atctctgccc | ttgaagtcat | tcgctgcata | tctggagtac | agaactgtat | 420 |
| tcccaggcat | gacggacaat | ggc | | | | 443 |
| <213> <223> | 6670 457 DNA Glycine max unsure at a | | ons | | | |
| | 6670 | | | | | |
| ryryycaatg | ctacagtact (| yacaacatta | tacgccgctc | gctatcactc | tccanatcca | 60 |

| tatagccaag | agcaatgtga | gttaaattgt | gaaattcacg | catgtagtat | tgaagatata | 120 |
|-------------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| cctgcaaggg | ttacatcaaa | acaataatct | gtcagtatca | gaatcccctg | ttattcttga | 180 |
| aaaagcggaa | agtaatgaca | tagaaatctc | acacatcgta | tccaatctat | gctcataaac | 240 |
| tcaacattgt | taacaacttc | taatggaacc | acagcatcgg | gtttatggat | atgggctctg | 300 |
| accaacttgc | gcaatggttt | aaaccgagct | tgaattcctt | ccatatcatc | ataaaattca | 360 |
| tcgccatgtt | catcgtaaat | acagcctaaa | ttctccgcat | tcaaatcctc | aagattagga | 420 |
| cactcacaaa | gaagctcagc | agaatgcata | gcactta | | | 457 |
| <210> <211> <212> <213> <400> | 6671 461 DNA Glycine max | ς . | | | | |
| | ctagtagttt | tctqtttqat | ttatagatta | aaataaaaa | 222221212 | 60 |
| | aaaaaaatat | | | | | |
| | | | | | | 120 |
| | gaaaaatatt | | | | | 180 |
| | aaacaccctg | | • | | | 240 |
| gtctttttat | tacaaaaact | tattttctac | ttttttctct | ctctccaatt | tgaggagata | 300 |
| cagatgagga | aaacaaacaa | ttttctctcc | acttttgcta | cttaaatttt | tctttcttcc | 360 |
| ttgttactag | atgaaccaaa | tgagggaaac | aaacagaatt | aataagtttt | ctttccttta | 420 |
| ctttctagga | taaattagtt | tgtagatttt | tattctatta | С | | 461 |
| <210> <211> <212> <213> | 6672 477 DNA Glycine max | | | | | |
| <223> <400> | unsure at a 6672 | ll n locati | lons | | | |
| ngtatgtaat | ggacgatgtc | atggtttcag | ccaaaataaa | gtttgttatt | catcgccttt | 60 |
| aatagcgagc | cagctaatag | ctatactagc | ttcctgttga | gtattgactt | gctcatgtca | 120 |
| agaatttaag | aagcatcttc | cacatgatta | aaaagaaaag | gtgtttaatt | ttgtttaatg | 180 |
| tgctaatacc | tgtaggttct | tttgggataa | ataacaccta | tgatttttct | gaaagtcaga | 240 |

| | aataaaattc | caaattgtgt | ctaaggtaac | ttgtagtttt | tgcttaaatt | ttcaataaat | 300 |
|---|-------------------------------------|---|------------------|------------|------------|------------|-----|
| | atatagatgg | agaaaaaata | caataatttt | tcaagtttct | ctgttttcaa | ttcttttcca | 360 |
| | ttaattgagg | tgtataaatt | aattctaacc | tgtaagagaa | atctgattta | ttctattttc | 420 |
| | ttatataagt | gttngagtag | ttctcaaatt | tactctacca | atggttaaat | atctgac | 477 |
| | <210> <211> <212> <213> <223> <400> | 6673 449 DNA Glycine ma unsure at | x all n locat | ions | | | |
| | agcttctggt | gggacatctt | gacttgcttt | ccattctgac | attcaccaca | gattctgcct | 60 |
| | tcttctattt | tcagattgag | gatgccttta | acagcacctt | tgtcaatgat | tttcttcatg | 120 |
| | cctcttaagt | gcagatgtcc | aaatctttga | tgccatattc | tgacttcatc | ttctttggag | 180 |
| | gatagacatg | tggaggagta | gctggtttct | tggggtgtcc | ataggtaaca | attgtccttt | 240 |
| | gatctgctgc | ccttcattag | aacttcactc | ttctcatttg | tcaccaagca | ttctgacttt | 300 |
| | gtgaagttta | cattgaaccc | ttcatcacac | acccgaccga | cgctgatcaa | gtttgcagtn | 360 |
| | agtnccttta | ccagcagtac | tttgttcaga | ctaggaagtc | catcatgagc | tagctttccc | 420 |
| | attccaatga | tctttccttt | agagccatc | | | | 449 |
| | <210> <211> <212> <213> | 6674 467 DNA Glycine max | | | | | |
| | <223> <400> | unsure at a | all n locati | lons | | | |
| | ggataggttg | acctatatat | atgtatatat | acttatatta | ttttttgggt | accaatatat | 60 |
| | acttatatta | ttctttaggt | acaattaatt | atttttttga | aacaagtaga | ctttgattac | 120 |
| | acattactgt | tccataactt | ccattcctat | aatcaagtaa | gactttaatt | acaatttagg | 180 |
| | tatgagtcat | gtgtcccttt | atattcctca | ttatttttat | tggctttcct | attcctgtta | 240 |
| , | atgtttcctt | ttcctttaac | tttcctatta | agttcctact | actccatagc | anaggaatat | 300 |
| | taatgtgaag | aagactttta | aaaaggctat | caggccaagc | cagactntta | aaaaggtcag | 360 |

| gtcgagccaa | aataaaagca | nttgatagac | tataggctag | gctcaggcct | canaaattta | 420 |
|---|--|---|--|--|--|--------------------------------|
| ttataggcta | ggctcaggcc | ttttaaagtc | tggtctgacc | tagtcta | | 467 |
| <210> <211> <212> <213> | 6675 446 DNA Glycine max | x | · | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| agcttctata | taagctgaac | cattgtatca | atatacacaa | gttgagtttt | attcagaaaa | 60 |
| ttagagttta | tctcttttat | cttggtgaga | gtgattctcc | taaattcttg | agtgattcaa | 120 |
| gaacaccctg | gctgtatcaa | aggactttca | caacctttgt | gtgttgccct | cgctggaaag | 180 |
| agtgattctt | tccttcctat | catctccacc | cttgttcttt | caaaccacaa | ttccagaaaa | 240 |
| tccacctctg | cccaaaatta | tctcgtgacc | ataactccca | ttttacacac | tcaaattaag | 300 |
| tgattcttga | gcctaaattg | aatttcaaaa | cgagaccttt | cacctcgttt | tggaatcacc | 360 |
| tcatttggag | ccctgtagct | tccgttattg | ccatttctat | atttctgtcc | agccaccact | 420 |
| | | | | | _ | |
| | tntaccatcc | | | | | 446 |
| | | cattca | | | | 446 |
| <pre>cancel taacctacgt <210> <211> <212></pre> | tntaccatcc 6676 466 DNA Glycine max | cattca | | | | 446 |
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| <210> <211> <212> <213> <223> <400> cccatcacat | tntaccatcc 6676 466 DNA Glycine max unsure at a 6676 | cattca call n locati gtggcggtcg | .ons ggcgatggtg | cacaacaagt | tttccacatc | |
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| taacctacgt <210> <211> <212> <213> <400> cccatcacat cacaaagcgc cccacgtagc ttcccaacat agagcaaagg | tntaccatcc 6676 466 DNA Glycine max unsure at a 6676 gtggtactat gcataaaccc ccatatactc caaagtaaaa | cattca cattca cattca cattca cattca gtggcggtcg accatccct ttttctctca cgacattcaa tgccaaaaca | ons ggcgatggtg gttgcccacc acaccgggtc acagcacaag ccaaccaaat | cacaacaagt tccaactgag cccatcaatc ctatcacagc cacagctntt | tttccacatc ctcacgtact ctcccaagct caagcaaaac ctcacttaaa | 60 120 180 240 |
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| <210> <211> <212> <213> | 6677 531 DNA Glycine max | |
|-------------------------|--|---|
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| gggcccgggg | atgatgcttc tatctctgtc gcgggatcct tagagtcacc tgaggcatgc 60 | 0 |
| aagctaggaa | ggtagtcata cctcacaaga tatatgtatg tgtgtttaag tagcgaaaat 120 | 0 |
| accttggata | tgcatgtatg taatttaggt ggcaaaaaaa atacctcaaa atatatatgt 180 | 0 |
| gtgtgtgtgt | gtgtgtgtgt gtgtgtgt gtgtatgttt aagtagtaag ataccttgga 240 | 0 |
| tatgcatgta | tatagcaaaa atacctcaca aaacatatat atgtatgttt aggtagcaag 300 | 0 |
| ataccttgga | tacacatgta tatagcagaa atacctcaaa taaatataca catgtttagg 360 | О |
| tagcaaaata | cctcatgaaa aaaaaaaaca caagcggacg agaacaaana atatatcttt 420 | Э |
| cggctgaaaa | gccagcacac ttttgaaaga aataacttcc agcttttctt tganaaagat 480 |) |
| tcaccgatca | taacaccagc ttttgaaaaa aatgtgtatg cacctgaagg g 531 | L |
| <210> <211> <212> <213> | 6678 350 DNA Glycine max | |
| <400> | 6678 | |
| aaagcatttc | tttcaaggat aaaaacaagg tccatgtaaa ttaagaatag ctatccacaa 60 |) |
| tcactaaggc | ataatagttc cctcctatac tcatagttct aaaaggacca aacaagtcta 120 |) |
| aatctaagag | ttcaagcaat ctagaggttg aaatcatatt tttagattta aaagaaattc 180 |) |
| tagattgctt | tecettttga catgeateae acaagteate etteceaaae ttaaaettag 240 |) |
| gaagtccctt | aaccaactta ttgcctctaa gaaactctga gatcaataca tttatcttcc 300 |) |
| cgtgtttgat | taccactaag cattgatata aaactaagtc taaaacaaaa 350 |) |
| <210> <211> <212> <213> | 6679 595 DNA Glycine max | |

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| <223> <400> | unsure at all n locations 6679 | | | | | |
|---------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
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| tttnnnnnaa | ggcggcgcgc | gatganacga | gaccaagnan | naccngacac | naannanacn | 120 |
| gaagcccacn | ggcacnncca | taccaactac | gcgggccctt | tacacttcat | caaaaagagg | 180 |
| ccatcaacag | acgaggcata | ccatccaaac | ccaagaaaca | gcatacgcat | gcacccatat | 240 |
| aaaagaacgt | atgaaccgga | taaaacgaaa | ctgtgattca | caaacgtcac | agccctgagc | 300 |
| tcaagttgct | cccccgcgct | atctaactcc | cttgaggtaa | catacacgca | cacacacaca | 360 |
| tatccaacta | tttcgaggcg | cacatcacga | taacgctact | aaattaacat | ggacaaccgt | 420 |
| cggagaagcc | aagcaaacaa | cacagcaggc | acaccgtgaa | cggatcagac | gaggggctgc | 480 |
| agcgtgctaa | gcaaacagaa | cctcagagag | acatgaagga | acacggaaca | ctcgagcaca | 540 |
| gacgtatgag | cgttgnctgc | aactagccct | cgcacgggga | gaaataacaa | cgaag | 595 |
| <210> <211> <212> <213> | 6680 462 DNA Glycine max | | | | | |
| <223> <400> | unsure at a | ll n locati | ons | | | |
| agctnttcga | ttcattctat | gtacccgtag | tggtccacat | tgtgtttcgt | gcatttttat | 60 |
| tctcgttttg | tttacttttt | ataccccctg | ttgacgtgct | taagccattt | tacttaagtc | 120 |
| atttctcgct | taacttaaaa | ataaaataaa | tttccaccga | acgtttgaat | tgtattatct | 180 |
| gttaacttcg | gttaaaataa | attctgaccg | ttcggtcgtg | ccgtaaccac | gttggaaatc | 240 |
| aaaaagaggt | aaaaaataat | ataataatca | aaaaacatct | ttaggtaaaa | taaagcggaa | 300 |
| aatcaatcgg | acgttttctc | tttgggattt | ctcattctta | atcgaattga | ttaataacta | 360 |
| aaagtgaaac | taaggctaaa | atcaactcgc | ctagtcaagc | tcgtccataa | aaataagctc | 420 |
| ttgaagtttg | catttcatta | tctcactaag | taaaatggat | ca | | 462 |
| <210><211><211><212><213> | 6681 473 DNA Glycine max | | | | | |

| <223> <400> | unsure at a | all n locat: | ions | | | |
|-------------------------|--|--------------|------------|------------|------------|-----|
| tcanaccaca | gcaacacana | atctaggtgt | ccaaaacccc | tcaattcaat | gggttttcta | 60 |
| ggtttgaaaa | gtgaaattga | gaatgaggta | aatttgaagc | aaactctcac | ctcacaccag | 120 |
| tccataacat | ctattgagac | ttgttcaaac | tggttttaca | cctaaaatct | caccgaatca | 180 |
| aaatttgact | cttcaacacc | caaattttgt | cttagaaata | gctctttgtt | cactttggtc | 240 |
| atttgtttt | ctctctagca | cagtccaagc | tttctcataa | gtcctaaatg | acatttcaag | 300 |
| ctaagattta | ctcactctaa | cctctaaata | ctaccaattc | cagatttggc | cttccagccc | 360 |
| tcaaaaattc | actctntttc | cacttctaac | accacattct | tactttctaa | ccctaggtta | 420 |
| gttctaccct | tcatctctaa | cagtttttca | taagcaattt | cagcatataa | aca | 473 |
| <210> <211> <212> <213> | 6682 487 DNA Glycine max | : | | | | |
| <223> <400> | unsure at a 6682 | ll n locati | ons | | | |
| ggatctctaa | gtcacctgcg | gcatgcaagc | tntggttaat | caagattcaa | cttccctaat | 60 |
| gtgaataact | cacattatgt | tgatattatg | tacacattcc | aaacaaatca | tggatctgtt | 120 |
| tagaatatca | accttcaatt | tttttttct | ccaactacta | aaattattta | ctttatcctt | 180 |
| actcacttta | gaagatctaa | atctggttaa | caaagttatt | tgacataaaa | aaaatcaata | 240 |
| cactacagtt | aaaaacagtc | aagtagtgat | gatctttcac | tactcagctg | taaattacca | 300 |
| ctcatacacc | cgtaatcaca | tgtattatta | tattctgatt | ctgaactaag | ttaataaata | 360 |
| aacgatccca | actcatttta | gagggtaaaa | taagtaattc | cgattgtttg | ataaanaaac | 420 |
| caatacaatg | attacttact | ttaatcaacc | cacatcacca | aaacgataac | ttcataaaca | 480 |
| aataaat | | | • | · | | 487 |
| <212> <213> | 6683 426 DNA Glycine max unsure at a | | ons | | | |
| <400> | 6683 | | | | | |

| gacacttgaa | actaagcitc | taaggaggtg | aacttagttn | ttagatgggt | gtgtgtagct | 60 |
|----------------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| tagttctagc | ttctcaagga | agttntctca | aagaagcttc | tcaaggaagt | tttcttaaga | 120 |
| aagcttctca | aggaagctac | ctagtctata | aatagaagca | tgtgtaacac | ttgttgtaac | 180 |
| tttgatgaat | gaaagtetta | tgagatacac | ttcaaagttc | cacttctttc | cctcttttat | 240 |
| tccttcaatt | tcgtgctccc | cccttctctc | tttcttttcc | tccattaaag | catcctcttc | 300 |
| aagcttctta | tccaaggcaa | ttcttggtgg | tgaagctcct | tcttccttgg | cttattccct | 360 |
| agtggatggt | gcctcccctc | tcctcttctc | ctttgccttc | cgctgcatct | ccatggtgaa | 420 |
| aaatca | | | | | | 426 |
| <210> <211> <212> <213> | 6684 454 DNA Glycine max | κ | · | | | |
| <400> | 6684 | | | | | |
| agctagttac | atttgtatta | gagctggatg | gtatctgagc | ttgatctatc | cagcttgtta | 60 |
| cataatttgt | tggatggtat | tagagctaca | taaacatcca | gttattggat | cacccgtatt | 120 |
| tatctacact | ctagatgtct | attcctaagc | gtgaggggtg | gtgttgtttg | gccaccaaca | 180 |
| atttttccac | gttccaaatg | tccaatcctg | gaagtgaagg | ggtatattgt | gttcccacat | 240 |
| tgactagaga | tatgaccaat | gtggtcctta | taaggcttgg | acagtcctca | ccttacaagt | 300 |
| cggttttgta | gggttgagtg | atgccttaag | tatgaattct | aagaatcccc | ttcattctct | 360 |
| tactctactt | tttctattct | acattcctat | ctcaccatcc | cacttctagg | ttttcttatt | 420 |
| cacttttcgg | gccctagcat | tatgatctga | cttg | | | 454 |
| | 6685 414 DNA Glycine max | τ | | | | |
| <400> | 6685 | | | | | |
| | aaacatgaca | | | | • | 60 |
| aacacaaatg | aattatatag | aaatacttct | cacaacatgg | ggagtaaaat | ccctcacaca | 120 |
| atttcacata | atcatattaa | aatcataggt | tcaaaaacac | aaaaacacaa | agagcattca | 180 |

| attttatcaa | ccagttcgca | ttaaggcatc | aattaaccca | tcaaacataa | caatctcatg | 240 |
|--|--|------------------|------------|------------|------------|-----|
| attataatca | taaaggcata | attacaatac | aataaacatc | ctaaaataaa | cctcaaattt | 300 |
| gatcctctaa | ggatcgttac | acatgtttat | tctaacccca | attgcgataa | actcaaccct | 360 |
| tacctctaag | cgggctcacg | tgtgtagtcc | agcaacgata | gcggcgtctc | taat | 414 |
| <210> <211> <212> <213> <223> <400> | 6686 425 DNA Glycine max unsure at a | x all n locat | ions | | • | |
| agctngccaa | aggtcgaana | ggagcttgtc | cgatcaattg | agcaagacca | aagaaaacat | 60 |
| gtgggccatc | atcgaccaat | acaaggaaaa | gttaagccta | gcggtaactc | acaaacaaag | 120 |
| gctagaggac | gagtacgtga | aggtataagt | cctgcaagtg | gaaagggaag | caagggaaag | 180 |
| ggtgatcgat | tcattacaca | gagaagcaat | gatgtggatg | gataggttct | cctttactga | 240 |
| aattctgata | ctggggacag | atgtcgtaca | ggatgtcacg | acatcgcgct | tcagaacatg | 300 |
| cagcttgtat | atgaccgtat | gaacagatta | nacaagtaaa | taacacaaga | gaattgtaac | 360 |
| ccagttcggt | gcaacgtcac | ctacatctgg | gggctaccaa | gccagagagg | aaatccacta | 420 |
| aaata | | | | | | 425 |
| <210> <211> <212> <213> <223> <400> | 6687 470 DNA Glycine max unsure at a | | lons | | | |
| | ttatntgtat | gggttggatg | ttgaattctg | attatteeta | atacagagat | 60 |
| | agggtgaacc | | | | | 120 |
| | ggaatgattt | | | | | 180 |
| | gaatataagt | | | | | 240 |
| | ggttcagtag | | | | | 300 |
| | gtagttgcta | | | | | 360 |
| | | | | | | |

| ttttcaaact | gttttgcatc | caatgccttt | gtgaaaatat | ctgctatttg | ttcctcagtg | 420 |
|----------------------------------|-------------------------------------|--------------|------------|------------|------------|-----|
| tcaacatgct | ccagtgtgat | aactttatca | tcaacaagct | ctctaatata | | 470 |
| <210> <211> <212> <213> | 6688 473 DNA Glycine ma | x | | | | |
| <223> <400> | unsure at 6688 | all n locat | ions | · | | |
| agcttaacta | actccaaggc | atcacctgct | gctttatact | ccgaatcggt | agttctcacc | 60 |
| taccagaagt | tccagaatcc | agtacagact. | tctatttcag | cttatgtgtg | agtaaaatat | 120 |
| tgctcaaata | ataaatcatg | ttgatgttgc | tattcaggaa | aaataacaaa | ataccaataa | 180 |
| attatgttaa | taataaaggg | gttggtatgt | gttgatggta | aattatggag | ctacttattt | 240 |
| acctgcaaca | actccccgca | ccctaagctc | ttttgataac | ttttcaacaa | attgtcgggg | 300 |
| attgagatgt | cgaacgcttg | aaaattcaac | ctcaaactct | tctgggacca | tgttacagca | 360 |
| ataaggaacc | caagatgaaa | gaattcgctt | tcggtcacat | ttagcaacta | taggagccct | 420 |
| gttagggaaa | catttaacaa | aatagacgtt | attntacaca | tggagataac | aat | 473 |
| <210> <211> <212> <213> | 6689 470 DNA . Glycine max | × | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| tcaagatgta | gttaagatac | ctgacaactt | ctgttcgtgt | ntgttgcttg | atagaaacac | 60 |
| agatgctaga | tataataata | tgaggaaggc | tgcttctcgg | gcagattccg | gtgacaacta | 120 |
| tttatactgt | ccaagggttg | tagatctaca | ggatgaggat | ntaaggcact | ttcagtggca | 180 |
| ttgggaaaag | ggggagcctg | tcattgtcag | caatgtgctn | gcaaaaacat | ctggtttaag | 240 |
| ctgggaacca | cttgtcatgt | ggcgtgcatt | ccgtcagatg | actaagacca | agcatgaaca | 300 |
| acatttggat | gtgaaggcaa | ttgattgctt | agattggtgt | gaggtttgtt | taatttctca | 360 |
| atcttgaact | tcgagggaat | tttgcacaaa | ttccattgct | catgttcatt | ctcatgaagc | 420 |
| ttatotttaa | attototaat | attaataatt | attttaacto | gaaggagtga | | 470 |

| <210> <211> <212> <213> | 6690 445 DNA Glycine max | × | | | | |
|----------------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| <223> <400> | unsure at a | all n locat | ions | | | ٠ |
| agcttcacaa | gtaaattaac | ctcctgcctg | aagtcctgac | tgtattaaaa | agtaatcagc | 60 |
| agaaagaaaa | ggataagtgg | ctgacaaaag | gataagatat | aaaaaatagt | tctgaaatta | 120 |
| cacaagctta | aaccaagttg | tctgtctatt | gctatgaagc | aaggactcta | acactaacac | 180 |
| cggacacgac | ataaatactt | caacacggct | aatgtctaaa | atataggaca | tggggacacc | 240 |
| gcatatacac | acaaatagag | agattctaat | taaatgaaat | atgagtaaca | tagtggatgt | 300 |
| tatggtgagg | aggaagatca | attttatgtg | cctacaagaa | actaagtgga | caagtgaaaa | 360 |
| agcgaaagaa | ttagacagct | cgggatttaa | gctgtggtat | acgggaaaaa | tcagatcaag | 420 |
| aaatggngta | gggattattg | tggac | | | | 445 |
| <210> <211> <212> <213> | 6691 81 DNA Glycine max | • | | | | |
| | aagctctgat | accacttott | gaacaagtgg | cctcagatat | cttaagaaga | 60 |
| | gtgtgaatta | | 3 3 - 33 | | oodaagaaga | 81 |
| <210> <211> <212> <213> | 6692 422 DNA Glycine max | : | | | | |
| <223> <400> | unsure at a 6692 | ll n locati | ions | | | |
| agcttcccac | ccagctcgcc | caggcgagct | catttcttt | atgcgagcaa | ggttgcttcc | 60 |
| tccagaagca | acageettet | ggaggaagga | tctggaaggc | ccaagtgggc | cagattgcta | 120 |
| tttgtacccc | cctttttact | aaatgcaccc | ctcctatttt | tttggtaatt | ctttttccgt | 180 |
| aacgttacga | aactttacga | atttcgtaac | gatacttatt | tteetteese | aaggttacga | 240 |

| atccttacgg | attatgtatt | tactttttat | tagcattcga | agaagttacg | gaaactcacg | 300 |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| aattgcgcan | aaacacctct | tttcgatttc | tgcacattac | ggaatttcac | ggatcgcgca | 360 |
| agcctgcttc | cttttgattt | ctgagacgtc | tcgtgacttc | atttattgtg | caacaaagga | 420 |
| cg | | | | | | 422 |
| <210> <211> <212> <213> | 6693 484 DNA Glycine max | ĸ | | | | |
| <400> | 6693 | | | | | |
| aaactaagct | tccaaacatc | caagcaaaac | aacattcaaa | cagcacaagc | tatcacagcc | 60 |
| tagcaaaaca | gagcaaaggc | agaaaactct | gctcaacaca | tcaaccaaaa | tcacaggttt | 120 |
| tctcacttaa | agaccacagt | aaaaattcct | tcgatccaat | tcgttaaccg | ttggatcgac | 180 |
| tccaaaattt | tactggaagt | ctatagtgca | taagcctaca | ttttgaccgt | tgggatctac | 240 |
| tagcaaacat | tgagaactca | ttctgcacta | gactttccac | agccaaccac | acacaagcat | 300 |
| ttttctgcac | ttgtgcaaaa | ttctgctgca | caatttcaca | gcaaaaattc | tgcataagtg | 360 |
| cagatttcga | aaatcacact | tcctctcatc | caatcttgcc | caaatcaatt | cctacaagtc | 420 |
| ccaaatcatg | tatcaatcat | gtctaaacca | aattcaagct | ttaaagcaca | gcaacacaga | 480 |
| atct | | | | | | 484 |
| <210> <211> <212> <213> | 6694 451 DNA Glycine max | c | | | | |
| <223> <400> | unsure at a 6694 | ill n locati | ions | | | |
| ntaagaagtt | gtcaaacatt | aatgaataga | aaacaacata | ttgtagttgc | tactgacaag | 60 |
| aaatcaaact | tggtgaaaag | agaatatagg | attcatttga | tggcaacaat | tgattgtatt | 120 |
| catttctatt | gaagcaaaga | ttgacatttc | gtggtcatga | tgaatcaatt | tattcacaaa | 180 |
| atcaagataa | ttctattgag | cttctacata | ttcttgacaa | tcataatgaa | gatattgata | 240 |

acgttctaaa aaatgctcgt ggaaatctca aaccagtggc acctaatatt aaaaggatat 300

| tgtgatagct | gccgcttgtg | agaccaccaa | aattattgtt | gatgatgtta | gagatgattn | 360 |
|----------------------------------|-----------------------------------|--------------|------------|------------|-------------|-----|
| ttttgccatt | ctaattgatg | aatctcgaga | tatatcaatt | aaggagcaaa | tattggttgt | 420 |
| ttttgttatg | cagataanaa | tggaagtgtc | a | | | 451 |
| <210> <211> <212> <213> | 6695 488 DNA Glycine ma | x · | | | | |
| <223> <400> | unsure at 6695 | all n locat: | ions | | | |
| agtcgcctgc | tgcatgcaag | cttccatagc | aagaatataa | caatgatata | ttattagtat | 60 |
| atggaatgca | tggtttcttt | tttctttaga | taactatgat | agaatgaaga | gacactatcc | 120 |
| taatactatc | attaaaaagt | ttaccaaagg | aatctctcta | gaaaaggcta | cccatcaaac | 180 |
| aaaattttag | gcccggttcg | tttttactga | aagacagacg | atgacagtgg | agacaaagac. | 240 |
| gaagaacgat | aaaagtatct | attttcaccg | ttcatttgag | tataaagtaa | atagtcaatt | 300 |
| tggtacaaaa | tccacccaaa | taagtttgca | tccaaaactg | agcgaatttg | tgaagaaaga | 360 |
| agactgaaat | tgaggcgttt | ataaaaaatt | attcttgtgt | ganaaatatg | aaacacaccg | 420 |
| agagcttaga | ttcaaatatg | caccccaatc | atattcgaat | atggaagacc | tagagaacaa | 480 |
| ccaacata | | | | | | 488 |
| <210> <211> <212> <213> | 6696 455 DNA Glycine max | ς. | | | | |
| <223> <400> | unsure at a | all n locati | ons. | | | |
| tattagttgt | tacaataatt | ntagactcct | caacaattta | catacatcag | tttcgcgtac | 60 |
| aaggtagaga | acattgtacc | cttttgtttc | cagaacatac | tgtgttacaa | atagcttcaa | 120 |
| tctttcaaat | cattgccttc | tcgaacaata | tacacaacac | tntgtgtttc | ttcttcaatt | 180 |
| cgatctcttc | tttttactct | tactttgagg | tatatattct | taccttagtt | acaaacttgc | 240 |
| aaccatgtca | atgcccttgc | tcacaaactt | gcaacacatt | gagacactcc | tcaatgcacc | 300 |
| aaaccccacc | gttagtgcat | ccattaaaag | atggcactct | gcattcatgg | ccatctattg | 360 |

| ttcccgagct | attatgtcac | actccactct | caagaaacca | aacaaaacca | aagcaaaagc | 420 |
|----------------------------------|-----------------------------------|-------------|------------|------------|------------|-----|
| ctcaccttca | ccaacaccaa | caccaacacc | atctt | | | 455 |
| <210> <211> <212> <213> | 6697 459 DNA Glycine ma: | x | | | | |
| <223> <400> | unsure at 6 | all n locat | ions | | | |
| agctataaat | aggctctgaa | tccgtgacgt | tgttcttatc | gccaccctca | cgcttagcgc | 60 |
| gagtaagtgg | atttgagctt | agcgccagtc | ttgcactgag | cctggctgaa | gacaactgct | 120 |
| gcgcataaca | cactgatctc | gcccttagcg | cgcagccttg | atattgatgc | tcttccagat | 180 |
| tcttcggtcg | tgctaagcac | gctgaagctg | tgcttagtgg | tggatgcgcg | cttagcccac | 240 |
| tgaagagcta | agctcaactg | tcacttttag | catttcatga | cttagcctct | ttttcaccta | 300 |
| gaattgcaca | tatttcatca | ttaaatccaa | tagaaatatt | ctagagacaa | cattaacaat | 360 |
| aaaacaagat | ttatttacaa | actactacga | aataaccata | aattggagaa | actatacaag | 420 |
| ttttggaaaa | tgctntatat | acaaaagtta | gtcgtataa | | | 459 |
| <210> <211> <212> <213> | 6698 456 DNA Glycine max | ς | | | | |
| <400> | 6698 | | | | | |
| cattatttct | tatagagaat | acttatagtg | tataccataa | taattgccac | aaattgtttt | 60 |
| ttttttatga | tttcaagttg | ttgtaaacta | aatacagaaa | ctcaattaca | aaagttttac | 120 |
| aaatcaaaaa | cttaattata | ttttttaatt | taaagactta | attaaaaatt | ctcaaataat | 180 |
| ttaaagagtt | accaattagt | ttaacaaaaa | caaatagtaa | caagtgagga | tccttaaact | 240 |
| ttttttttt | agaacaaagt | atctgaccag | atataaatat | aagtaaaaaa | atggtttcac | 300 |
| gctaactaag | tattactagt | tgttccatcg | ggatttggct | tgagatttgc | ttattgaaaa | 360 |
| ccaacaatca | atgcattttt | tttacttata | tttgaaacca | aactattact | agttgttcct | 420 |
| attgggattg | gctcgacaat | ggttatgaca | atgatc | | | 456 |

| <210> <211> <212> <213> | 6699 282 DNA Glycine max | ĸ | | | | |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| <400> | 6699 | | | | • | |
| tctctactag | ggtttcctag | cgttagagag | aaagagaacg | gattggagcc | tccattttgt | 60 |
| tgtctctgtg | cgagggacat | ttctctcacc | caacatgtta | ttccaaaaat | cccaacggtg | 120 |
| ggaatgtgtg | gaactaagtt | ccaaacctat | tgtacaagtt | ttacaatgat | ccaactgtta | 180 |
| acgagtccac | agtcgtaatt | atatttggat | agggatcggt | gtatgccgca | aaaataaagt | 240 |
| tgtgtgcgat | ggacatttct | cttatcacag | acattaatca | ca | | 282 |
| <210> <211> <212> <213> | 6700 436 DNA Glycine max | ς | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| tactatgtcc | caacaatcct | actagtagtt | cctgtggact | cttgttgcat | aaacattctt | 60 |
| gccaatccaa | aatcagaaat | tnttgggttc | atattctcat | caagtagtat | gttactagct | 120 |
| ttcaagtctc | tgtgaatgat | ttttagtctt | gagtacttat | gaagatagag | tattccttga | 180 |
| gaaatccctt | ctattatgtt | gaagcgcttc | ttccagtcta | gtaacatgct | tctagtgcaa | 240 |
| tcttgtcaat | taaaacaagg | cagtatgtgt | tagaatatat | actatacaag | agtaatacac | 300 |
| tgcaagacat | acatagttat | gcttaagata | ggaaagcata | agtaaaggat | taaaggaatc | 360 |
| atccgtaaca | attattgaaa | aattcagtca | gaanacttga | aatttcctca | taagagcatc | 420 |
| gatggtatat | ataatt | | | | | 436 |
| <210> <211> <212> <213> | 6701 431 DNA Glycine max | | | | | |
| <223> <400> | unsure at a 6701 | 11 H TOCATI | ons. | | | |
| agctagaatt | ggatatgaac | catgagaact | atatttttgt | catatctaac | catcaatggt | 60 |
| actattgact | tattgtaaat | gcataaaaaa | taatgcttta | gcactaagag | ctacaagtaa | 120 |

| agaaaactgc | atattaagtg | actttattct | ttattaagat | atttcaattc | gggggccatg | 180 |
|-------------------------|-----------------------------------|-------------------|------------|------------|------------|-----|
| ttataaatcc | tactttgcat | gatcttatac | aatctctaat | aaatttgtta | gagatgcaga | 240 |
| agaagattat | cagattcatt | acattaatat | aagatattgc | attgctatag | agatgctgat | 300 |
| catgctttaa | tgttcttatc | tacatgagca | acttatattt | tcatgggtat | attcatagct | 360 |
| ctagatgatc | atatagatca | tattatgaga | gagctntatc | atgaaataca | agttgcttgc | 420 |
| ttgttggaag | С | | | | | 431 |
| <210> <211> <212> <213> | 6702 381 DNA Glycine max | k all n locat: | ions | | | |
| <400> | 6702 | | | | | |
| taaatcttaa | taattagtag | gatgttcttg | gcacttctca | tgttaaattg | ttcacattat | 60 |
| cttaatattt | ttaaactttc | tttcacaaaa | gtaacaaaat | aaattatttt | ctataaaata | 120 |
| cactgaacta | catctaagct | taatcaactt | tagcaaagta | tcattaaatt | ttctcataga | 180 |
| tgtatntatt | ttataattaa | tttatagaaa | taactaattt | tcaaaaaaaa | aatcatgaaa | 240 |
| ttaacaaaat | aaactatttn | tacaaaatac | accgaactaa | atatgaattt | aataaacttt | 300 |
| agcaagctat | catttaatct | ttttcatana | tggatttatc | ttatgatatc | atctactcat | 360 |
| gtatcaaaat | taatttcatg | a | | | | 381 |
| <210> <211> <212> <213> | 6703 456 DNA Glycine max | s. | | | | |
| <223> <400> | unsure at a 6703 | ill n locati | ons | | | |
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| caacttgaaa | cttatgtgcn | ttaagtgaga | cgcacatgct | tctttttca | nttgtgaaga | 120 |
| tgttcaaagt | ttggctatga | agatggttca | cactgagaaa | catttggtat | ttccattggt | 180 |
| ttataaactt | attgagctag | ctntgatatt | gccggtgtcg | acaacatccg | ttgaaagagc | 240 |
| tttttcagca | atgaagaata | tcaagtctaa | attgcgcaat | aagatcaacg | atgtgtggtt | 300 |

| caatgacttg | atggtatgtt | acaccgagcg | ggagatattc | aagtcacttg | atgatattga | 360 |
|-------------------------|----------------------------------|-------------------|------------|------------|------------|-----|
| tattattcga | acatctaccg | caaagaagtc | tcggaaagga | cacttgcctc | gtaatttatt | 420 |
| taacccgctt | tgtaaattat | gttatctctt | tattta | | | 456 |
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| atggagaatt | gcactaagca | atcactacgc | acggttccaa | gctccagggt | ggaggacgca | 120 |
| tgaacgaaaa | agcaattcat | ggggctccga | aaaagggttg | aggatggaga | attgcactaa | 180 |
| gcaatcacta | caaacggctc | caaactcgtg | ggtgaaggac | gcatgaacca | aaacgccatt | 240 |
| catggggctc | agaaaaaggg | ttgaggatgg | agaattgcac | taagcaatca | ctacgcatgg | 300 |
| ctccaagctc | ctgtgtggag | gacgcatgaa | cgaaaatgca | attcatgggg | ctccgaanaa | 360 |
| gggttgagga | tggagaattg | cactaagcaa | tcactatgca | tggctccaaa | ctcgtgggtg | 420 |
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| aatctgcacc | tttcgccaca | ctctgtggtt | tatgctcctc | taccgaccac | catacagacc | 120 |
| tttgcccttc | tatgcaacaa | tctgaagcaa | ttgaacaacc | tgaagtttat | gctgaaaaca | 180 |
| tctacaatag | acctcctcaa | cctcagcaac | aaaatcagcc | acaacagaac | aactatgacc | 240 |
| tctccagcaa | taggtacaat | ctcgggtgga | ggaatcatcc | cgaccttaga | tggtcgaatt | 300 |
| cttcacaata | gcaacaacaa | caacaacagc | cttattatta | aaatgctact | gggccaagca | 360 |
| gaccatacgt | tcctccacca | atccagcgac | agctacaaca | acgacacatc | ggacccgaaa | 420 |

| tagcaa | | | | | | 426 |
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| tgagtttcgt | gčtccactct | ctctttctct | ctgtgtttac | ggccctccat | tgaagcatcc | 120 |
| tgtccaagct | tcttatccaa | ggcacattct | tggtggcgaa | gctgcttctt | gcatggctta | 180 |
| ttccctagtg | gatggtgcct | cttgtcacct | ctttgccttt | gtcgtccgct | gaatctccat | 240 |
| ggtgagaaat | caccattgaa | tgaaggtcac | agatgcagcc | ttcatagaag | cttcacaagc | 300 |
| gagcttccat | gactgtggct | ccctctgcct | ccactcatca | tctgctacct | tcaagctctt | 360 |
| acccatgggt | tactatgttg | | | | | 380 |
| <210> <211> <212> <213> <213> | 6707 465 DNA Glycine max unsure at a | K . all n locat: | ions | ÷ | | |
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| ctccacctgg | nagacgcctc | tcttcattat | cgtcttatct | cctaggttgt | tataggggtt | 120 |
| ggatcacata | tcttcaatga | tcttgatggc | atcagcaaga | ggttttaaca | tgatgttacc | 180 |
| tccacaagca | acatccaaac | ttgtcctgtt | gtgtgaggac | actccaccat | agaaaatatg | 240 |
| aacttgcctc | tgtggggaga | agccatgatg | tgaacaactt | ttgatcatct | cttgtaactt | 300 |
| ttttaggctt | tatgtagact | ctcttgttcc | ctctacacaa | agtttccaat | atccgtgatg | 360 |
| tactcatccg | tcttcatggg | agagaaatac | cttcttaaga | aggcatttat | gcactggttc | 420 |
| catgtagtgg | tgtttttcgc | aggtattgag | cacaaccaat | cccat | | 465 |
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| <213> | Glycine max | | | | | |
|--|--|---|---|---|--|--|
| <223> <400> | unsure at all 6708 | n locati | ions | | | |
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| atggtgcctc | ccatctcctc tt | ctcctttg | ccttccgctg | catctccatg | gtgaaaaaat | 120 |
| caccattgaa | ggacctcatt ga | agctcaaa | gatccagcct | ccatagaagc | cccacaagca | 180 |
| agcttccatc | aagttctcac tt | aaanatga | aaagatatat | ataattttct | caaataatat | 240 |
| tttactaaat | tctctcttta ta | agaaattg | agttttggct | attgtaacat | attatgaaat | 300 |
| cgatgtaatt | gattacaggt tg | atgcaaca | aattacaaaa | ttaatgtaat | cgattacaga | 360 |
| tcaatataac | aaattacgaa at | cgattaaa | acttagctta | gatcaataaa | atagtcccta | 420 |
| ggaaggaatt | aatcatttac aa | acctatgt | aatcaattac | | | 460 |
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| | | | | | | |
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| <400> | | ् कृ | | ttanaaaaaa | aacaaaatta | 60 |
| <400> | 6709 | ्ष् caaagtag | aatacttgaa | | | 60 |
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| <400> agcttataaa atgtaattaa cgagaatcaa | 6709 gggatgctcc tt aaaagtaaaa at | caaagtag ttgacaaa ttatagca | aatacttgaa taatcaatac ttatttcata | ttttttatat | ctaatatata ctcatcaata | 120 |
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| <400> agcttataaa atgtaattaa cgagaatcaa tatctttata taacaagggt | gggatgctcc tt aaaagtaaaa at taagaatatg tt gaatattct ct | caaagtag ttgacaaa ttatagca attaatat agaggtaa | aatacttgaa taatcaatac ttatttcata ttcctaataa atctttcatg | ttttttatat actttaatta tttaaaaaga ataggaatga | ctaatatata ctcatcaata taaaaattac caacgtgggt | 120 180 240 |
| <400> agcttataaa atgtaattaa cgagaatcaa tatctttata taacaagggt caatcatgtc | gggatgctcc tt aaaagtaaaa at taagaatatg tt gaatattct ct tgagtctaac aa | caaagtag ttgacaaa ttatagca attaatat agaggtaa tgccaaca | aatacttgaa taatcaatac ttatttcata ttcctaataa atctttcatg aaagtgtgta | ttttttatat actttaatta tttaaaaaga ataggaatga gagaaataca | ctaatatata ctcatcaata taaaaattac caacgtgggt gccctttgat | 120 180 240 300 |
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| <400> agcttataaa atgtaattaa cgagaatcaa tatctttata taacaagggt caatcatgtc aactgggcgg | gggatgctcc tt aaaagtaaaa at taagaatatg tt gaatattct ct tgagtctaac aaa gacaagttga cc gttgaccaac aaa | caaagtag ttgacaaa ttatagca attaatat agaggtaa tgccaaca ataaataa aaaataga | aatacttgaa taatcaatac ttatttcata ttcctaataa atctttcatg aaagtgtgta aatgacatgc gtgggtaggc | ttttttatat actttaatta tttaaaaaga ataggaatga gagaaataca tatgaaatga | ctaatatata ctcatcaata taaaaattac caacgtgggt gccctttgat | 120 180 240 300 360 420 |

| | | * | | | | |
|-------------------------------------|--|-------------------|------------|------------|------------|-----|
| tagtgtggct | gactggctta | aggaanatgt | tctctagtct | gatgactnta | gtgtcgacta | 60 |
| gattcacctt | ttggttatat | ggttctaatt | tttggaaaat | ttctttactt | tttgttatca | 120 |
| aactcaaacc | aattattgac | tcaatcaggg | tactaaatta | ctatgtcaag | ggtagattaa | 180 |
| gtgaattaat | ggttgactga | cattgagttt | aaaatattaa | aaatntctaa | ttaaaaatta | 240 |
| aaatatcatc | aaatctcaga | agagttaaca | aaacaacaaa | taaatatata | aacgtctcaa | 300 |
| ttatcatttt | ctaaaatatc | acaatngacc | catcaccatc | atgattgtcg | ttgtcaacat | 360 |
| cataaccacc | g | | | | | 371 |
| <210> <211> <212> <213> <223> <400> | 6711 409 DNA Glycine max unsure at a | k all n locati | ions | | | |
| agctagctaa | cccatggaag | ctcctaatat | ctctcactct | ttntgnggtg | ggccatcctt | 60 |
| ggatggcctt | gattttctca | gggtccactt | ggaccccatt | tctaccaact | acaaaaccta | 120 |
| agaagactat | attatctaca | caaaaggtac | acttctctat | attttcatag | agggtgtttt | 180 |
| cctaaggact | ggaagaactt | gcctgagatg | tcctaagtga | tcatctaggc | tcctattgtc | 240 |
| cactaaaata | tcatcaaaat | aaacaactac | aaatctacct | atgaaatccc | ttaagacatg | 300 |
| atgcataagc | ctcataaagg | tgcttggtgc | attagtgagc | ccaaaaggca | tcactagcca | 360 |
| ttcatacaaa | ccaaacttgg | tcttgaaagc | ggttttccac | tcatcaccc | | 409 |
| <210> <211> <212> <213> | 6712 492 DNA Glycine max | \$ | | | | |
| <223> <400> | unsure at a | ıll n locati | ons. | | | |
| acactataga | aactaagctt | aagctcagga | aaagcttgaa | gatgttttga | ttnttacatg | 60 |
| cctaactttc | ttgagtggca | tttgtattgg | ttgttatctg | gtatgtttca | tcttagtaca | 120 |
| tatgatatta | gtattgcatc | attcatcatc | atggttagtg | tgaagaaaag | tttcttcaag | 180 |
| aggcaaaaac | tctctgtttt | aatcgattat | aggtctatca | taatcgatta | cagcaagatg | 240 |

| t | ttgaagctt | aaagagttga | gtctcgtatc | attntaatca | attacagttg | tttcaaaatc | 300 |
|----------|-------------------------------------|--------------------------------------|-------------------|------------|------------|------------|-----|
| g | attacgttg | ttgtttgaga | caatgactaa | tttatttagg | agtctctgct | ntaatcgatt | 360 |
| a | ccaagtggt | ttaatcgatt | acttctctct | cgcttagttg | ttcaaaagtg | aacaagaaca | 420 |
| С | ttgaattga | ttactttgag | tatctaatca | attacattgt | tctttgagtt | attttagatg | 480 |
| t | tagtaagaa | ca | | | | | 492 |
| < < < | 210 > 211 > 212 > 213 > 223 > 400 > | 6713 446 DNA Glycine max unsure at a | x all n locat: | ions | | | |
| | | | aat | + | | | |
| | | ggacaagcat | | | | | 60 |
| C | gacttcgtt | cttacaggca | gccctctgcc | aaaggggatc | actcaaccaa | tgtgaagtta | 120 |
| g | ctcgttgtt | attatggccc | atttcaggtc | acagttaagc | tcgggcccgt | agcttatcgc | 180 |
| g | tggattttt | cggcaggcgt | ttgcatccac | ctggtgtttc | attgctcgaa | cctcaaacct | 240 |
| t | ttcggggcg | agacagactc | caattcctca | attcctttgc | cacccaattt | tcacgagaat | 300 |
| C | aaccactca | tatcccctct | tgccattctg | gngtctcgtc | gtgcaacctc | tgatcctcat | 360 |
| a | gttcttggc | aggttttggt | gcagtggcag | ggtctcccac | cggaggagac | gtcgtgggaa | 420 |
| g | attgtgacc | agtctttgca | ggacta | | | | 446 |
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| | 223> 400> | unsure at a | all n locati | ons | | | |
| ng | gaatatctt | catttgagta | atgcaagcct | atccaagcat | ttattgtctt | tgttaggtgc | 60 |
| aa | agctgtatt | actgacttcg | agggtcagtt | cctccagaaa | ttcaagggag | aaagggaaga | 120 |
| at | ttaacaagg | tgaggaaaag | gggatttctt | attattctcc | ctcagcttgt | tatttacata | 180 |
| gt | tattatata | gacattccca | taacagaatt | tggacaattg | ctctcctacg | aatattctag | 240 |
| ta | aacagaatc | tctattgcta | ttttgcccac | taggaaataa | cgtgctgcaa | gcatgatttg | 300 |

| gtggagattc | tctaatttcc | cctttatccg | gtatcgccct | cttcagctca | gacataatct | 360 |
|----------------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| gcaaggtagg | tgggttcaca | attcttcttt | tgttcttggc | tcttctccct | tatgacccct | 420 |
| gatgctggtg | tttctcttgg | tatggtctct | tctccctttt | gcaccc | | 466 |
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| tttntatatt | ttgcatcaaa | gtccagtcta | cgtgtcacaa | tctgggacaa | tttgccacgt | 120 |
| tggatagtct | atgtgtcatt | aaaatttcca | acaatgcacc | tcacttacgg | cgttactttt | 180 |
| aaatttaacg | gcaaggacta | ttttgcaaaa | cttatgcaaa | gatagagact | attttttaca | 240 |
| tttcaaaaag | atagggacta | atttgcaaaa | gggatcaaaa | gtcagggacc | aaaatgccta | 300 |
| tttactggag | aaaaaaaat | tttgtcaatg | tttgtggagt | ctaaaagtcc | caagggatac | 360 |
| tcttcaagta | tagagccatg | tatccgtcaa | tgatctcaaa | ttggtcggct | tanagtctca | 420 |
| tgggtgtcat | atgttaatgc | aacaactatt | gggtggtagc | gattgcagta | t | 471 |
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| gtctacaatg | gaagacaaaa | ttttggttta | tatcattaca | tatattctgg | caccaagatc | 120 |
| tagcaatcat | gctcaagtca | ccgatgacga | cttgcatatc | atatatgggc | caaaattagg | 180 |
| tattcaaatg | atttgggtac | tattgattgt | tgaaaagtcg | tcgactagtg | gattataaat | 240 |
| tttcatatgc | aattntgacc | tcaagattca | ttgattattt | caatatcgat | gtttctaatg | 300 |
| ggattgtaga | ctttaccaaa | gcctctaatg | agaaaactga | aaggcatctc | aagaagcttg | 360 |
| gcatgtcata | tgttgatcat | gagtgggtca | tggaaggaca | acaacccgca | acaacaaacg | 420 |

| ttgatttgat | ggaagaagaa t | ctg | | | | 444 |
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| gtcggạttga | gtcccgtaat a | atatcgagac | gctcgacatt | gataataaaa | actctgtgaa | 120 |
| aattcaaaca | acgataactt t | ttactcaga | tgtccgattg | cgttccgcaa | tatatcgaga | 180 |
| tgctcgaaat | tgaaaatgga a | agctcgtagc | acatgcaaac | cacaataact | ttttactcgg | 240 |
| atggccaatt | gtgtcccgta a | atatatcgcg | atgctcaaaa | ttgaatacaa | aagctgtgag | 300 |
| cacatacaga | cgatagtaac t | ntntactcg | aatgtccgat | tgcgtcccga | agtatatcga | 360 |
| gacgctcaaa | attcagagta g | gatgttgtga | ccacaatcta | acgacaataa | ctctttactc | 420 |
| ggat | | | | | | 424 |
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| tatggtcgtn | ntgaattgct t | agaccttat | gttttcaatt | tctagcgcca | ctatatagta | 60 |
| cgggacacaa | tcggacatcc g | gagtaaaaag | gtatagtttt | ttgaatttac | tgagagcttc | 120 |
| agttttcaat | ttcgagtgtc t | cgatatatt | acaggactca | atcagacatc | cgagttaaaa | 180 |
| gttatggtcg | tttgaatatg c | tacgagctt | ctgttttcaa | ttgcgagcgt | ctagatatac | 240 |
| taagggacac | aatcgcacat c | cgagaaaaa | agttaatgtc | gtttgaattt | gcacagagct | 300 |
| tctgttttca | attttgagcg t | ctcgatata | ctacgggact | caatcggaca | tccgagttaa | 360 |
| aagttattat | ggtttgaatt n | gctaggagc | tactattttc | aanttggagc | atttcgatta | 420 |
| taacgggact | caatcggaca t | | | | | 441 |

| | | | • | | | |
|----------------|-------------|---------------|------------|------------|------------|-----|
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| <211> | 302 | | • | | | |
| <212> | DNA | | | | | |
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| aactagatca | actatattcg | aaacgacatt | tcagttggta | agactgccca | aatctctact | 120 |
| ctttactcag | tcatcaatca | acacgaatgg | aatatttggc | tatcaatagc | tcggcaacat | 180 |
| taaaaaggat | ctctactacg | gacatcggct | gacgcaaata | atccagagaa | gccctcttga | 240 |
| taagctcggc | taacagttct | attcttgctt | actcaaatgc | catccaactc | aagtgagcag | 300 |
| ag | | | | | | 302 |
| | | | | | | |
| <210> | 6720 | , | | | | |
| <211> | 437 | | | | • | |
| <212> | DNA | | | | | |
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| <223> | ingure at a | all n locat: | ione | | | |
| <400> | 6720 | iii ii iocac. | 10115 | | | |
| | | - | | | | |
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| aacatttaag | tatgtttgta | aggtctggct | ttacgcatct | cttcttggtc | aagcaatcca | 120 |
| cattcctcta | agcactaagc | ttataaggcg | aaagtgctta | agtatctaga | taaccatgtt | 180 |
| cacaataatt | ccatcttttc | ataattggtg | ttatatttgt | tatatctttt | atcttctttt | 240 |
| gtttcagttt | catagcttat | ttgctattac | atatattttg | ttgttgggat | tctagttagg | 300 |
| ccttgtggct | aactaaatag | ggataaatct | tttntttaac | ttcacattta | tctcttgttt | 360 |
| ggaatgcact | agtgtgatgt | tacctaatta | gaatatcttt | ctaggagagc | gtgaggatga | 420 |
| cnatcaatgg | attctag | | | | | 437 |
| | | | | | | |
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| <211> | 297 | | | | | |
| <212> <213> | DNA | _ | | | | |
| ~41J> | Glycine max | • | | | | |
| <400> | 6721 | | | | | |
| agctaagaag | agtatggggt | acccatctct | atgtttatct | atggtggcgg | ccaggcgagg | 60 |

| gtgcacaaca | agttctccac | atccactatg | cgcgcataaa | cacaccatac | cctgttgtcc | 120 |
|-------------------------------------|--|-------------------|------------|------------|------------|-----|
| acctacaact | gagctcacgt | actcgcacga | ctcccatata | ctccatatat | ggagaccggg | 180 |
| taccgactga | tccacttaag | ctgacacgac | atacaagctc | atctacgttc | ctactggaca | 240 |
| ctctatcaca | gtcaagctaa | accacatcaa | atgcagatat | gactgctcta | tacacac | 297 |
| <210> <211> <212> <213> <223> <400> | 6722 427 DNA Glycine max unsure at a | x all n locat: | ions | | | |
| gcttctaagg | aagtgttctc | aagaaagctt | ctcaaggaag | ctacctatta | tataaataaa | 60 |
| | | taactctgat | | | | 120 |
| | | tcttccttca | | | | 180 |
| | | | _ | | | |
| CCCCCCCCCC | ttcctccatt | gaagcatcct | ctccaagett | cttatccaag | gctcatcttg | 240 |
| gtggtgaagc | tccttcttcc | atggcttatt | ccctagtgga | tggcgcctcc | tctcacctct | 300 |
| tctcctttgt | cttccgctgc | atctccatgg | tggaaaatca | ccattaaagg | acctcattga | 360 |
| agctcanaga | tccagcctcc | atagaagccc | cataagcaag | cttccatcat | gtggtaatca | 420 |
| gagcaca | | | | | | 427 |
| <210> <211> <212> <213> | 6723 352 DNA Glycine max | | | | | |
| <400> | 6723 | | | | | |
| cttgagcttc | gctcattacc | tgtcataagc | tatttttaca | aagctcggct | cggcttatat | 60 |
| aaaagtgtgg | ctcggcccac | gagcctattt | aaaagtctgc | ctaacatcgc | ccttgattaa | 120 |
| ccaattatct | taaaacctag | cgaacaacga | actataagaa | gaaccttagt | caaattcgtg | 180 |
| tcagtactgt | acaaatccaa | aaataatgga | ctaacataat | catagtgaat | tcaagcggca | 240 |
| caacacagcg | tacatcatga | gaaaataaaa | agaacgtcat | tttatgagac | gtatgaatta | 300 |
| gacatggttt | gcacaacatg | aattttatct | tacgtgcaca | gtgtgtatga | ac | 352 |

| <210> <211> <212> <213> | 6724 423 DNA Glycine max | | | | | |
|-------------------------------|-----------------------------------|--------------|------------|------------|------------|------------|
| <223> <400> | unsure at a | all n locat: | ions | | | |
| gcttctacat | cctatgacag | tgttgcctca | cttttgcttt | tttgactcta | gcaatagaga | 60 |
| cactatatag | tggtacctgc | actccaagaa | ctttggatac | aatcgcctta | ctgattcaaa | 120 |
| ctcggcaatc | ctntaaagca | gctagatgag | ttttgggtca | atggtctatg | ggttgaataa | 180 |
| tgtgataaaa | ataacgcttc | aatagtgtga | tacatataca | taagattatt | aacatataat | 240 |
| gtataaaata | aaaacacagc | ttatataagc | ctacatattc | taatgtatgt | gaaaaaagga | 300 |
| tttaatctta | tatattatat | cttagaagat | aatctctaag | agtataaaac | tatcgtaaag | 360 |
| ttaaaaggaa | taaaagttat | attttgaaat | atgttcgcat | aagacttata | ttaatattat | 420 |
| att | | | | | | 423 |
| <210> <211> <212> <213> <400> | 6725 402 DNA Glycine max | ζ | | | × | |
| | | agatataata | | | | C 0 |
| | | | | acactcaata | _ | 100 |
| | | | | tgtacctgag | | 120 |
| | | | | atagctgaga | | 180 |
| | | | | tagttaatgg | | 240 |
| ctttattcga | tcagtgaaca | aagcttcttc | tttcagagta | agctctgcag | tcagagaaaa | 300 |
| ttctgcaaga | ataacatgta | atgggtttaa | taatgtggaa | ctttaggttt | aaaaatgacc | 360 |
| aaacacatgt | aatgggcaat | gaagttggca | ttacaaattt | ac | - | 402 |
| <210> <211> <212> <213> | 6726 452 DNA Glycine max | : | | | | |

| tataagaacc | aaaatgcctc | aatcatttcc | aaatatgcat | gttattttga | agcatcaaca | 60 |
|-------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| agaatcaagc | caaggctatt | gtgcaagcaa | tcaatggggc | aaaacacacc | aaatgattat | 120 |
| gatgatggat | ggctcaaatt | ctcacaaagg | taaactcatc | actttcaaat | tgagctttca | 180 |
| aaactatcat | gacatgtaga | ggagaatcaa | agatttcaag | tcacaaaatg | tcaaaaactt | 240 |
| ttattttcaa | aacaattacc | catttcttga | acatatccta | taattcaaag | aaaaacatgc | 300 |
| aaagtagtac | atgcgcacgg | aattggccca | aaatattaaa | ctaaaaatcc | gacgaaacta | 360 |
| acaacattaa | caaattaaca | caactgacaa | attaacaaaa | ccaacaaaac | tagcanaacc | 420 |
| aaagaacact | ccccccata | cttaaacaac | ac | | | 452 |
| <210> <211> <212> <213> | 6727 447 DNA Glycine ma: | × | | | | |
| <400> | 6727 | | | | | |
| agtcacctgc | tgcatgcata | gcttctaaaa | agatctgatg | acacttttcc | ttacatggag | 60 |
| tgtcttctct | tactccaact | tagctaccac | acctcagatt | tgaatatggg | cagagctagg | 120 |
| ttggtctatg | gcttggtaac | caacatggac | acgaacattg | gagcccttat | ctcagatcag | 180 |
| atttcttcta | ttgctcagag | taactcctct | aggcttggat | ttctagcctt | aatcactgcc | 240 |
| atatgtagag | ctagaggagt | tacctctaat | agtctgatct | atgagagctt | gagctcgacc | 300 |
| attaatttgg | cctacattaa | gaaaaattgt | tggaatgtgg | atgatctaat | agttaacttt | 360 |
| aaaggggcaa | ggaaggcaag | ggttctacca | actgatgttc | cttcttcttt | tactttacca | 420 |
| actccttgca | cttctactac | gcctaca | | | | 447 |
| <210> <211> <212> <213> | 6728 403 DNA Glycine max | c | | | | |
| <400> | 6728 | | | | | |
| cttgaatgct | ctattcaatg | gagttgacaa | gaatatcttc | agactaatca | acacatgcac | 60 |
| agtggccaaa | gatgcatggg | agatcctgaa | aaccactcat | gaaggaacct | ccaaagtgaa | 120 |
| gatgtccagg | ttgcaactat | tggctacaaa | attcgaaaat | ctgaagatga | aggaggaaga | 180 |

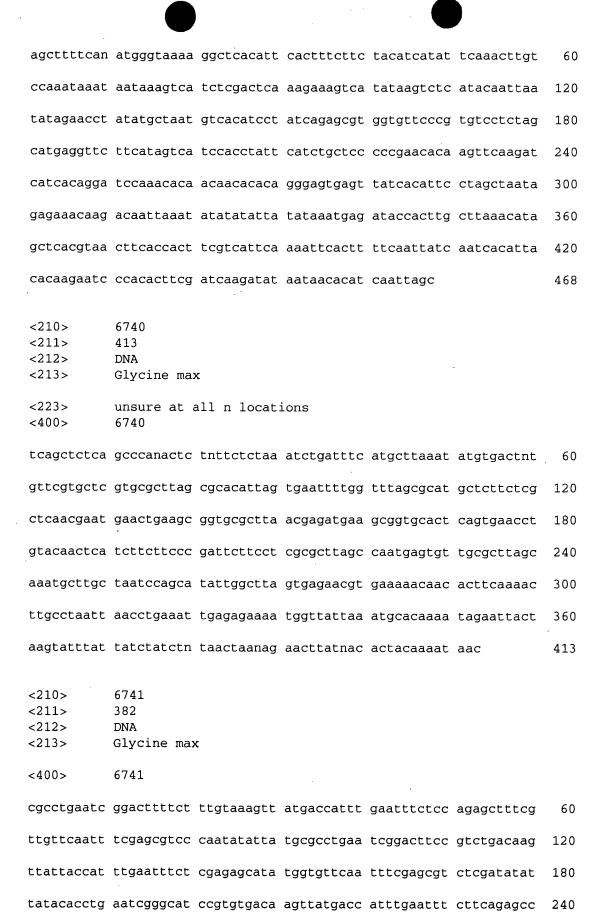
| gtgtattcat | gacttccaca | tgaacattct | tgaaattgcc | aatgcttgca | ctgccttggg | 240 |
|-------------------------------------|--------------------------------------|-------------------|------------|------------|------------|------|
| agagaggata | acagatgaaa | agctggtgag | aaagatcctc | agatccttgc | ctaagagatt | 300 |
| tgacatgaaa | gtcactgcaa | tagaggaggc | ccaagacatt | tgcaacatga | gagtggatga | 360 |
| actcattggt | tcccttcaaa | cctttgagct | aggactctcg | gat | | 403 |
| <210> <211> <212> <213> <223> <400> | 6729 545 DNA Glycine max unsure at a | x all n locat: | ions | | | |
| cgcgcattgt | tgctgcgatc | cnatcgacat | ccccgagatn | ctatatagnc | gacctcgagg | 60 |
| | | | tattttcttt | | | 120 |
| | | | tgcactaatg | | | 180 |
| | | | ttacacgcac | | | 240 |
| | | | gcgaacttga | | | 300 |
| | | | tacgagctgg | | - | 360 |
| | | | gtaatgatga | | | 420 |
| | | | taaatggttg | | | 480 |
| | | | agaggtacag | | | 540 |
| ggtcg | 3 | | | | | 545 |
| | | | | | | 0.10 |
| <210> <211> <212> <213> | 6730 503 DNA Glycine max | ς . | | | | |
| <223> <400> | unsure at a | all n locati | ions | | | |
| cttgtgctct | aggacgctnt | gtgatatggt | accctctcat | actgcatgga | tattgttgta | 60 |
| ctagggcgct | atagtgctct | cttggagtag | tgactgaatg | gactcgtgac | gtagaactcg | 120 |
| acgctgttta | ttatgtggct | caccaaacac | gattagtatg | cttattagga | tgcgatgaga | 180 |
| tcttagatgg | catgtggtga | tattaacaac | ggtcagattg | acacagagtc | cactattcgt | 240 |

| atttgactat | tctttactgg | gaatgcaaga | cctattgaga | cggacgggtt | gtgaaccctg | 300 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| cattctatca | tgcacgttgc | ttagatcacg | tgtggaggtc | cacgctaacg | gcacatggac | 360 |
| attatgttat | ggatgtattc | tattatgcat | taggacttgc | gctgatcaaa | catgcactcc | 420 |
| atgcttgagt | cttatactag | aggcgtggag | cgtcagatac | gtgcgtaaat | atcatagaca | 480 |
| cagtcatgcg | agggacttca | tcn | | | | 503 |
| <210> <211> <212> <213> | 6731 391 DNA Glycine max | × | | | | |
| <400> | 6731 | | | | | |
| agctttgtta | cgtatagtat | atcaaattaa | tatttgttgg | caaattaaaa | ttatgatcca | 60 |
| ccggatgaaa | aagcatctaa | ctttatttac | atatagtata | tcaaatcaat | aattttttac | 120 |
| aaatttgaaa | ttcgatccag | tgacgtactg | aagtccaagt | ttcttttaaa | tatagtatat | 180 |
| agatagataa | atacgatatg | caacatatca | tgtcaatatg | tttggaaaaa | aatttgttga | 240 |
| accctaaaat | aagtaaacta | tttatatatc | aataacattc | ataaaagtaa | tttcaagttt | 300 |
| ttaagggaag | tagtataaga | cttcactaca | tttacatttg | tataattgac | ttgagctacc | 360 |
| ggtagtaaaa | aaacgtgagt | gagttaatga | c | | | 391 |
| <210> <211> <212> <213> | 6732 455 DNA Glycine max | ς | | | | |
| <223> <400> | unsure at a 6732 | all n locati | ions | | | |
| ctaagctcgg | agatttatca | ttggttctac | tcgatgacac | cagaatatat | agttggaatc | 60 |
| atcaagcttn | tctgaaatcg | aaggaaaaga | ttgatgtgaa | tgatgagagg | aagtggacac | 120 |
| agcaaaattg | ttttctgcca | ttgatgaatc | cttctaagag | attggacatt | agatcctcca | 180 |
| agttctgagt | ctgtacgaaa | tgctgttgga | gttcttcaag | agattggggc | attgtcagtt | 240 |
| gatgaacaac | tcactcagct | agggcagaag | cttggctgtc | ttcctattca | tccatcaaca | 300 |
| ggcagaatgc | ttatttttc | catatagatg | atatgtcttg | atccagctct | aactcttgct | 360 |

| tgtgcattcg | agtttaatga | tccatntgtg | catcccactt | tacctgatga | atagaagaga | 420 |
|------------|-------------|-------------------|------------|---|------------|------------|
| gcttcagctg | ctagatctga | gcttggctct | ttgta | | | 455 |
| <210> | 6733 | | | | | |
| | | | | | | |
| <211> | 465 | | | | | |
| <212> | DNA | | | | | |
| <213> | Glycine ma | x | | | | |
| <223> | unsure at | all n locat | ions | | | |
| <400> | 6733 | | | | | |
| | | | | | | |
| agcttaccgc | ctctgccgac | caatgaatag | atttatgttc | attgcgctca | agtatgcttc | 60 |
| | | | _ | | 5 5 | |
| tgtaataata | attaaggata | caacaagaaa | aagatgcaat | aattctagtc | aaaggacata | 120 |
| | | • | | | | |
| agtttttatt | tttccttgat | taaatctatg | tgaattacaa | tcaaatcaca | acactcttag | 180 |
| | | | | | _ | |
| aaaaataatt | aattgatttt | aaaaacttga | agtaggaact | taattaaaat | ctcctaaaaa | 240 |
| | | | | | | |
| aataattaaa | atagcatttc | gttcacctgt | gactacaact | cgatccattt | aacatttcaa | 300 |
| | | | | | | |
| agtaaattcc | caaatcaaaa | tccacagtac | agtataatta | tgacccagaa | caatttgtta | 360 |
| | | | | _ | _ | |
| aatcactgag | caaaccaata | ttatttggca | taaaaattga | agttagatgc | tntagttatg | 420 |
| | | | | - | _ | |
| caacagaaca | agcatctatt | gaaaggccaa | acaaatatga | tcatg | | 465 |
| | | | | | | |
| | | | | | | |
| <210> | 6734 | | | | | |
| <211> | 481 | | | | | |
| <212> | DNA | | | • | | |
| <213> | Glycine max | x | | | | |
| | | | | | | |
| <223> | unsure at a | all n locat: | ions | | | |
| <400> | 6734 | | | | | |
| | | • | | | | |
| ntaatatatc | aaccaccaat | attagataca | attaactaat | tatgtgttta | cttcatctng | 60 |
| | | _ | | 3 - 3 | - | |
| tttgaattcc | aataagatac | atatgtacag | cttatgcact | ttgatttttg | ttatcgacat | 120 |
| | _ | 3 3 | 3 | | | |
| ttatagtttg | aaacaaaaat | gcaaattgga | ataataaatc | atggtagcta | gacaaataca | 180 |
| | | 33 | | | 9 | 200 |
| attttggtta | attttttaa | gagataaaac | tagtttatat | tcatatgggc | cgtcttgatt | 240 |
| | | J J •••••• | g | | ogooogacc | 210 |
| aatttgaatt | tgaatttcaa | gcgagatttg | tgtatttgtt | aattntggtc | aaaaaaatta | 300 |
| J 2 | - 9 | 5+5-5-0009 | uguaec ugu | aaceneggee | aaaaaaacca | 300 |
| ttggttgacg | aaattaatto | atttaaaatt | taaacaaaaa | ttaaatatgt | tatgaacgaa | 360 |
| 3333 | | | | Judacucyc | cacyaacyaa | 500 |
| aataaatata | taagcacaat | tagaaacgct | aaattaatct | actgtcttag | ttaaaatcat | 420 |
| | | | | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | uuuuu-cut | 440 |
| | 5 | | | 3 | | |
| | | | | tggagatcct | | 480 |

| g | | | | | | 481 |
|-------------------------|-----------------------------------|--------------|------------|------------|------------|-----|
| <210> <211> <212> <213> | 6735 392 DNA Glycine max | × | · | | | |
| <223> <400> | unsure at a | all n locat: | ions | | | |
| agctagttaa | agaacttaga | aaaaatcaag | aacttgcttg | ttcgcacatc | gttcgcgtgt | 60 |
| atgacatcca | ctccacaagg | tttgaagtag | aggagacctt | caatcctatt | acgcaacgtg | 120 |
| gcggacaaaa | gtgggcagtt | aacttgaacg | gtcattattg | tcaatgcgga | aggtattctg | 180 |
| cgcttcacta | tccatgttca | catattattg | cagcttgtgc | gtacgtgagc | ctgaactact | 240 |
| accaatatat | agatgttgtt | tatacaaatg | agcacatctt | aaaagcttac | tccgcacaat | 300 |
| ggtggcctct | tgggaatgaa | gcggctattc | ctccttntaa | tgacgcatgg | acacttatcc | 360 |
| ctgacccaac | tacaattcgt | gcgaaaggtc | gt | | | 392 |
| <210> <211> <212> <213> | 6736 467 DNA Glycine max | c | | | | |
| <400> | 6736 | | | | | |
| ctaagcttct | aaagaggtta | gcttagttat | tagagaggtg | tgtgtagtta | agctctatct | 60 |
| tctcaaggaa | gcttctcaaa | gaagcttctc | aaggaagttt | ctcaagaaag | cttctcaagg | 120 |
| aagctaccta | ggctataaat | agaagcatgt | gtaacacttt | ttgtaccttt | gatgaatgaa | 180 |
| agtcttatga | gacacacttc | aaagttccac | ttttctccct | cttttattcc | ttcaatttca | 240 |
| tgctccccc | ttctctcttt | cttttcctcc | attaaagcat | cctcttcaag | cttcttatcc | 300 |
| aaggcacatt | cttggtggtg | aagttcgttc | ttccatggct | tattccctag | tggatggtgt | 360 |
| ctcccctctc | ctcttctcct | ttgcctttcg | ctgcatctcc | atggtggaaa | atcaccattg | 420 |
| aaggacttca | ttgaagctca | aagatccagc | ctctatagaa | gctccac | | 467 |
| <211> <212> | 6737 454 DNA Glycine max | : | | | | |

| <223> <400> | unsure at all n locations 6737 | |
|-------------------------------------|---|-----|
| agctttgatc | aataaacttt tcttggaaga gtatgtgttg atcaaaaact tttttaaaag | 60 |
| atgaagagaa | atgaatcaga aaaattcttt agaaagatat tgaaagattg attgaaagat | 120 |
| gttgagagat | gatgatgaaa aacgattgaa agatagatta tagatgattg atgattataa | 180 |
| agatgttgaa | ggatgattca nagaatcatt gccatggtca catatttata atcttttgat | 240 |
| gactcaagtc | aaagtttgtg actcttggaa atttctttaa aactagtcac ttaaaaaagt | 300 |
| tgtgactttt | gaaaaaatct tcagaaacaa gtcacttgaa gaattgtgac ttttggaaat | 360 |
| atatttttcg | aaattagtca ttggtaatcg attacacatc aacagatgtg actcttcatt | 420 |
| ttgaatnttg | aaaattaaaa catttagaag ctct | 454 |
| <210> <211> <212> <213> <223> <400> | 6738 465 DNA Glycine max unsure at all n locations 6738 | |
| | acacaaagtg tgactatatg atgtgacaat cggttgtagc tagcatatac | 60 |
| tcacctcccc | ctctaaaatn taattggatt gggcttcccc caattcaatt aaatttattt | 120 |
| cccaatacat | acatcaaata ttcacttaat gcatgtgaaa ttacaaagca acccataata | 180 |
| caaaaattag | tctaggtatc ctaaaatata aaggctgaaa aatcctatat ttctagggta | 240 |
| ccctacctac | attatgaaac cctaaataca aggcccanaa aaaaatgaaa ccttaatata | 300 |
| atatgtacaa | agataagtgg gctcatactt agtccatggg cccaaaatct accctaaggc | 360 |
| cgatgagaac | cctagagcct tctcttgcat ctctggtcta atcttcttgg agtcatctat | 420 |
| ccaatggcct | tggagggtag gaatgcatca ttcccttccc cttga | 465 |
| <210> <211> <212> <213> <223> <400> | 6739 468 DNA Glycine max unsure at all n locations 6739 | |



| ttcgttgttc | aatttcgagc | gtcccaatat | attatgcgcc | tgaatcggac | ttccgtgtga | 300 |
|-------------------------|-----------------------------------|------------|------------|------------|------------|-----|
| caaagtatta | ccatttgaat | atctcgagag | cactcgctgt | tcaatttaga | gcgtttcgat | 360 |
| atattatgcg | cctgaatcgg | ac | | | | 382 |
| | 6742 424 DNA Glycine max | × | | | | |
| <400> | 6742 | | | | | |
| tctcgatata | tgatgcgcct | gaatcggacg | tccatttgat | aagttatgac | tctttgaatt | 60 |
| tcctgagagc | ttgcgttgtt | caatttcgag | cgtctcggta | tattatgcgt | cagaatcgga | 120 |
| cttccgtgtg | acaagttatg | accattttaa | tttctcaaga | gcattcgttg | ttcaatttcg | 180 |
| agcgtctcca | tatattatgc | gcctgaatcg | gacttccgtg | tgataagtta | tgaccatttg | 240 |
| aatttctcga | gagcttgccg | tgttcaattc | caagcgtctc | gatatattat | gcacctgaat | 300 |
| cagactttcg | tatgacaagt | tatgaccgat | tgaatttctc | gagaggcttc | gctgttcaat | 360 |
| ttcaagcgtc | tcgatatatt | acgcgcctga | attgacttcc | gtgtgaaagt | tatgacaatt | 420 |
| taat | : | | | | | 424 |
| <210> <211> <212> <213> | 6743 217 DNA Glycine max | < | | | | |
| <400> | 6743 | | | | | |
| gaccatcaat | agggtcaggg | aatctatctg | cgaggagact | tgccatgacg | aggctgatga | 60 |
| tcacatggag | aacttatttt | ggtaaaacac | catgacagca | taaatgacat | attcacgcgc | 120 |
| cgcgcaacgc | tatttgaaaa | tcaatcctgc | gttttttata | ccttcaagat | agaacttcgt | 180 |
| gaatttcttc | agggacaatc | ttaccctcaa | ctagaaa | | | 217 |
| <210> <211> <212> <213> | 6744 428 DNA Glycine max | c | | | | |

| actatgaata | ctaagcttca | tggtctctgg | tataggctct | gggactttcc | attgcaactt | 60 |
|----------------------------------|-----------------------------------|-------------------|------------|------------|------------|------|
| atgtggaggg | caaagaaggc | cttcttctgg | gggccagagc | cataagtgag | acaccactct | 120 |
| agaagagtta | gacttctaac | cttgtgtcag | gacctatggg | ccaaggaata | gtctcaggta | 180 |
| ctcaattttt | acggaacgtc | tgttttgatt | tagctgtttg | tagcacgtct | caatgcgctg | 240 |
| gttgaacgac | atgcaatttt | tacccttaca | ttgaaagggt | ttcgcattga | ggggttttcc | 300 |
| acttcaaatt | gtgtctctgt | tttctttcat | ttctattatg | tgctctatac | tttattggta | 360 |
| ctcctgacag | gtactcgcaa | gggtgggaaa | atatatgtac | gttatctcgt | cttactctgt | 420 |
| tatagatt | | | | | | 428 |
| <210> <211> <212> <213> | 6745 144 DNA Glycine max | ς. | · | | | |
| <400> | 6745 | | | | | |
| tctcgcctca | acacctgcca | acagcagatg | accgatactc | ttggtgcgtc | tagcatggaa | 60 |
| gaatgagata | ggtctgtatg | aattcctagg | gatgggaata | tcacggtgtg | tatgcactga | 120 |
| cacgaaccat | agggtttcaa | tgcg | | | | 144 |
| <210> <211> <212> <213> | | k all'n locati | ions | - | | |
| | 6746 | | | | | |
| | _ | | | tgtcattcaa | | 60 |
| | | | _ | tattattagt | - | 120 |
| tataattatt | tgtttcaatt | atgtgtattt | atttttaata | ttgcaagatc | ttattgattt | 1,80 |
| gtgtattaaa | tataatttat | aatatatacg | ttagataagt | aacggtttgt | ctaaataata | 240 |
| ttgacaaaca | agaacttatt | aagcatgaaa | tttgaaataa | ctttatttta | cttgaagaaa | 300 |
| tctttaagta | aaatgttcaa | acaactatga | ttgtattttt | aatgttttaa | atttaattct | 360 |
| aaattctaag | tcattaaatt | ttacaatata | agattaacat | actcaaaatt | aatatacaag | 420 |